

Vision For The Future



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EXECUTIVE SUMMARY

The City of San José (City) administers and implements the requirements of the National Pollutant Discharge Elimination System (NPDES) permit for the San José/Santa Clara Water Pollution Control Plant (Plant) on behalf of San José, Santa Clara and the Tributary Agencies. This report documents activities during the period July 1, 2000 to December 31, 2000. Some of the highlights for this reporting period include:

- Awarded the 2000 National Wastewater Management Excellence Award from the U.S. Environmental Protection Agency (U.S. EPA) --Large Advanced Plant Category --,
- Continued progress on the stream flow augmentation project,
- Completed the Copper and Nickel Total Maximum Daily Load (TMDL) process, and
- Received an Award for Excellence for water conservation program outreach.

The City's continuing strategy is to focus on integrating local and regional programs to achieve costeffective protection of the South San Francisco Bay (South Bay) as well as ongoing assessment of the programs to ensure continuous improvement. This organization of this report is based on the key elements of that strategy as follows:

- I. Flow Reduction
- II. Pollutant Reduction
- III. Research and special studies
- IV. Regional cooperative efforts
- V. Public outreach

Flow Reduction

The City continues to work on flow reduction efforts to maintain the Plant's discharge of effluent (treated wastewater) below 120 million gallons per day (mgd). Highlights for this reporting period include:

- The average dry weather effluent flow (ADWEF) for 2000 was 116 mgd.
- The average flow diverted between July and September as a result of the South Bay Water Recycling (SBWR) was 10.2 mgd including seasonal storage and Plant irrigation.
- SBWR is near completion of its Phase II near-term and long-term master plan. The part of this plan will include solutions to increase system reliability.
- The City replaced the Ultra-Low Flush Toilet (ULFT) rebate program with two new programs
 offering toilet distribution and fee-for-service installation. The City began offering a full-service
 installation program for small MFDs.

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 The average flow from permitted industrial dischargers decreased by 1.25 mgd from the previous years.

Pollutant Reduction

The Plant had two violations for zinc concentration in September and December, a series of four violations for zinc mass loading starting from September to December, and one violation for tributyl tin concentration. The City is working with the Santa Clara Valley Water District (Water District) on the impact of its addition of zinc-orthophosphate to the drinking water to meet Safe Drinking Water Requirements. In addition we continue to review treatment plant operations, sampling protocol, laboratory procedures and potential industrial sources to determine and resolve other potential causes for these exceedances.

The following efforts continued during this reporting period:

- Monitoring the level of pollutants in sewers and investigate the sources of any extreme values,
- Recommending flow and pollutant reduction requirements as part of the City's development application review process, and
- Maintaining permitted industrial copper and nickel loading below 1997 baseline at 7.58 and 4.95 lbs. per day (or 14% and 32% below the 1997 baseline), respectively.

Research and Special Studies

The City researches and compiles special studies for a better understanding of the beneficial uses of the South Bay. The following are the highlights of these studies for this reporting period:

- Worked with stakeholders to develop Copper and Nickel Action Plans based on the copper and
 nickel TMDL finding of "impairment unlikely". The Plant NPDES permit was amended, in an
 uncontested action by the San Francisco Bay Regional Water Quality Control Board (Regional
 Board), to include these plans. (See Appendix C and D for a copy of these plans.)
- Received uncontested Regional Board approval for inclusion of the *Stream Flow Augmentation Plan* in Plant's NPDES Permit.

Regional Cooperative Efforts

Progress on the Watershed Management Initiative is continuing. Highlights over the last six months include:

- Continued progress on the Watershed Assessment Report,
- Developed pictorial vision of a model community in 2050 if the *Watershed Management Plan* was implemented,
- Continued progress on the Stream-Riparian Corridor Management Plan,
- Proposed awarding watershed grants to 12 project applicants, and

• Developed the *Stream Maintenance Management Plan*.

Outreach

During this reporting period, public outreach measures supported flow reduction, water conservation, and watershed management education. One high point was the Joey "Award of Excellence" for the design of the Water Efficient Technologies Program mailer.

Next Steps

Over the next six months, the City will emphasize:

- Reviewing and analyzing flow reduction options, and developing long-term flow reduction strategies,
- Developing programs to ensure compliance with zinc and tributyl tin requirements,
- Ongoing monitoring of copper and nickel levels in the Bay,
- Participating in the development of the Mercury TMDL plan,
- Continuing participation in the Watershed Management Initiative process,
- Developing an integrated monitoring plan to coordinate all data and monitoring efforts,
- Finalizing the SBWR Phase II master plan, and
- Continuing investigation of additional cooperative efforts with individual industries as well as larger industrial groups.

ABBREVIATIONS

ADWEF Average Dry Weather Effluent Flow

Audit Flow Audit Study

BMP Best Management Practice
BACWA Bay Area Clean Water Agency
BADA Bay Area Dischargers Association
BAPPG Bay Area Pollution Prevention Group

BASMAA Bay Area Stormwater Management Agencies Association

CBS Clean Bay Strategy

CII Commercial, Industrial, Institutional

City of San José

CPP Community Partnership Program
EIR Environmental Impact Report
ESD Environmental Services Department

IU Industrial User

MEEA Mid-Peninsula Environmental Educators Association

MFD Multi-Family Dwelling

MOU Memoranda of Understanding

NPDES National Pollutant Discharge Elimination System
Plant San José/Santa Clara Water Pollution Control Plant

PCBs Polychlorinated Biphenyls

POTW Publicly Owned Treatment Works

Regional Board San Francisco Bay Regional Water Quality Control Board

RMP Regional Monitoring Program

SFD-FFS Single Family Dwelling Fee for Service

South Bay San Francisco Bay, South of Dumbarton Bridge

SBWR South Bay Water Recycling

Urban Runoff Program Santa Clara Valley Urban Runoff Pollution Prevention Program

TMDL Total Maximum Daily Loads
ULFT Ultra-Low Flush Toilet

U.S. EPA United States Environmental Protection Agency

Water District
WE&O
Watershed Education and Outreach

WET Water Efficient Technologies

WMI Santa Clara Basin Watershed Management Initiative

iv ABBREVIATIONS

UNITS OF MEASURE

af/yr acre-foot per year ccf hundred cubic feet gpd gallons per day lbs/day pounds per day linear foot

 $\begin{array}{ccc} mgd & million \ gallons \ per \ day \\ mg/l & milligrams \ per \ liter \\ \mu g/l & micrograms \ per \ liter \\ ppt & parts \ per \ trillion \\ \end{array}$

v ABBREVIATIONS

I FLOW REDUCTION AND WETLANDS MITIGATION

The City of San José (City) administers the San José/Santa Clara Water Pollution Control Plant (Plant) on behalf of the Tributary Agencies. In response to marsh conversion and protection of endangered species habitat, the City proposed the original *San José Action Plan*¹ in 1991. The three main components of that plan were marsh mitigation, water conservation, and water recycling. The San Francisco Bay Regional Water Quality Control Board (Regional Board) approved, and the City adopted, the *San José Action Plan* with a goal to reduce flows from the Plant to under 120 million gallons per day (mgd). The City proposed a *Revised South Bay Action Plan*² in June 1997 amidst concerns that the Plant had attained several milestones outlined in the 1991 *San José Action Plan*, but was still exceeding the 120 mgd trigger. The Regional Board approved and incorporated the *Revised South Bay Action Plan* in the Plant's 1998 National Pollutant Discharge Elimination System (NPDES)³ permit. The *Revised South Bay Action Plan* called for the following: expanding the indoor water conservation and water recycling programs, promoting the industrial water recycling and reuse programs, furthering the inflow/infiltration reduction programs, and developing environmental enhancement pilots.

A detailed look at the progress in each program is presented in the subsections that follow. The combined efforts of these programs have brought the 2000 average dry weather effluent flow (ADWEF⁴) below 120 mgd, as shown in Table 1.

FLOW, mgd **MONTH INFLUENT DIVERTED* EFFLUENT** July 126.9 13.1 113.8 August 126.3 8.9 117.4 September 126.5 8.7 117.8 Average 126.5 10.2 116.3

Table 1: 2000 ADWEF

I-A SOUTH BAY WATER RECYCLING

In February 1998, Council approved a financing plan that identified \$127 million in funding sources for the 1997 *Revised South Bay Action Plan*. Included in the \$127 million is approximately \$102 million for water recycling, \$33 million of which was committed in prior

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^{*} Includes Recycled Water to South Bay Water Recycling distribution system, seasonal storage at the Plant, and Plant irrigation

¹ In accordance with Board Order 91-152

² In accordance with Board Order 97-111

³ Board Order 98-052

¹

Average Dry Weather Effluent Flow is the lowest average flow rate for any 3 consecutive months between May and October

years, \$30 million is included in the current year (FY 2001-01) budget and \$39 million is in the proposed 2002-06 capitol improvement projects budget.

Findings and Accomplishments

In 1999, ESD initiated the development of a South Bay Water Recycling (SBWR) Phase II master plan and conceptual design to increase the distribution facilities' reliability and associated customer demand. The total estimated cost was \$183 million, which includes the \$102 million in water recycling facilities previously identified in the financing plan. If the SBWR Phase II master plan is approved by the City Council, funding will be sought for the additional \$81 million.

Conceptual planning and design for improvements to water recycling facilities to increase dry weather diversion and system reliability have been completed. Improvements identified in the SBWR Phase II master plan consist of pipelines and storage tanks that will allow the SBWR system to provide an additional 10 mgd to customers. The first stage of improvements was initiated in the spring of 2000 and could increase the summer diversion by 5-6 mgd by connecting new customers. These projects include pipeline segments in Milpitas and Santa Clara and incorporate an accelerated schedule to correspond with anticipated increases in sewer flow to the Plant. Other facilities will provide increased capacity and looping required for water supply reliability. The costs of these facilities were unanticipated in Phase I Planning. We are adding these features to meet the customers' demand for reliability equivalent to existing domestic supplies.

The average dry weather effluent flow for 2000 was 116.3 mgd, safely below the 120 mgd limit set by the Regional Board. For the same period, beneficial use of SBWR averaged 8.2 mgd and total diversion averaged 10.2 mgd. However, flows to the Plant continue to increase at approximately 2 mgd per year. The NPDES permit currently requires SBWR to initiate construction of distribution system improvements for Phase I to serve additional customers by January 2001.

Next Steps

Concurrent with the identification of near-term improvements, the Phase II master plan will consider long-term water recycling alternatives. These long-term alternatives include expanded urban non-potable reuse, export of recycled water for agricultural use, and further treatment for potable use of recycled water. Given the complex nature of the technology and associated permitting from the respective regulatory agencies, these long-term alternatives will be developed by the City, in close partnership with the tributary agencies, the Santa Clara Valley Water District (Water District) and other stakeholders. They should also be developed in concert with the Water District's water supply planning process and the Santa Clara County's water supply plan to ensure that the region has sufficient water to meet its needs.

I-B INDUSTRIAL RECYCLE AND REUSE

The objective of Industrial Recycle/Reuse efforts is to ensure that Industrial Users (IUs) in the Plant's service area are reducing the use of potable water, recycling their own wastewater, and/or using recycled water from SBWR in their facilities to the largest extent possible.

For this reporting period, efforts were focused on implementing flow audit studies, finalizing industrial reuse guidelines and drafting cooling tower fact sheets.

Findings and Accomplishments

I-B1 FLOW AUDIT STUDY

In the July 2000 Clean Bay Strategy (CBS) Report, ESD staff completed a final report summarizing the findings from the Flow Audit Study Program (Audit). The staff is encouraging industry to implement the Audit's resulting projects. A recent survey of dischargers indicates that seven additional projects have been implemented since the July report with potential flow savings of 123,000 gpd.

The Audit program will be an ongoing strategy of the City's flow reduction efforts. Revision of the Audit protocol is underway. City staff is trying to establish an efficient method for acquiring and analyzing flow data from water purveyors who service the Plant's tributary area. This process to date is very time consuming and is causing delays in beginning the next phase of the Audit process.

I-B2 INDUSTRIAL DISCHARGERS

The City continued to work with industrial dischargers to reduce flows to the sewer system by offering financial incentives and technical support. As shown in Figure 1, the average discharge from industry for the reporting period December 1, 1999 to November 30, 2000 is 10.3 mgd. There were several large dischargers that closed operations in the latter half of 2000. We anticipate a flow increase in 2001 as facilities open and the new non-industrial dischargers are included in the total permitted flow calculation for the first time.

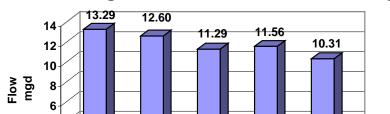


Figure 1: Average Flow from Industrial Dischargers

1998

1999

2000

1997

Baseline

1996

I-B3 INDUSTRIAL WASTEWATER REUSE GUIDELINES

The City is continuing to work on developing guidelines for industrial wastewater onsite reuse. These guidelines will standardize water reuse requirements, assist City Departments in evaluating reuse projects, and help maintain a level of consistency during the various permitting processes. Several City Departments are working together to resolve issues and finalize the requirements. After responding to interdepartmental comments, a revised draft is currently in circulation. When the guidelines are finalized, a copy will be included in the July 2001 *CBS Report*.

I-B4 COOLING TOWER GUIDELINES

The City is also developing guidelines for using recycled water from SBWR and/or reusing industrial process water in cooling towers. The core audiences for these guidelines are industrial and commercial cooling tower owners; heating, ventilation, and air-conditioning system (HVAC) owners; and maintenance personnel. These guidelines will include some or all of the following:

- Management of cooling towers to protect water quality,
- Operation of cooling towers to maximize efficiency and minimize water use, and
- Considerations prior to using SBWR recycled water or reusing process waters in evaporation systems.

A draft of these guidelines is under review. The tentative date for completion of the guideline document is June 2001 pending resolution of the Industrial Reuse Guidelines.

Next Steps

- The *Audit* program will continue to be an ongoing strategy of the City's flow reduction efforts.
- Revision of the *Audit Protocol* is underway and will be included in the *CBS Report* when completed.
- The industrial reuse guidelines and the cooling tower guidelines will be included in the *CBS Report* when finalized.
- The City will continue to investigate additional cooperative efforts with individual industries as well as larger industrial groups.

I-C INDOOR WATER CONSERVATION

The City's Indoor Water Conservation effort has a flow reduction goal of 5-8 mgd over a five-year period, with an annual flow reduction goal of not less than 1 mgd.

Most of the effort is focused on residential customers, who are responsible for 70% of the Plant's flows. Toilet use is responsible for most of this residential flow. Therefore, the residential programs emphasize the retrofit of Ultra-Low Flush Toilets (ULFTs), which are considered the single most effective residential water conservation measure currently available.

Individual program incentives depend on the program element and community sectors targeted, and include ULFT distribution events and full-service installation.

In the business sector, the City's efforts include toilet retrofits and the Water Efficient Technologies (WET) program. See section I.C2 for more information on WET.

Findings and Accomplishments

Through Indoor Water Conservation efforts for fiscal year 1999-2000, the City met its annual goal of 1 mgd.⁵

For fiscal year 2000-2001, the Program has so far achieved 164,000 gallons per day (gpd) flow reduction (through December) through Indoor Water Conservation efforts. This reduction is less than the 500,000 gpd goal expected for the first half of this fiscal year. The cause for this shortfall in flow reduction is due to delays in implementing the Small Multi-Family Dwelling Pilot Program (Small MFD), Community Partnership Program (CPP), and the Single-Family Dwelling Fee for Service (SFD-FFS) Programs. These delays were mainly caused by postagreement negotiations to resolve contractor disputes regarding data and outreach requirements, loss of the contractor's original commercial lease after one month (no fault of their own), and the disruptive impact of the contractor's move to a new property. This fiscal year, these programs were combined into a single contract to provide greater efficiency and to reduce costper-toilet. After lengthy contract negotiations, this contract was approved by City Council in June 2000. Program ramp-up began in July with toilet installations commencing in November after considerable start-up work. Detailed information regarding each of these programs and the success achieved through the various water conservation efforts is described below.

Since its inception in 1992, the City has retrofitted 178,000 toilets, with a cumulative flow reduction of 8.2 mgd based on the City's original savings estimates and 5.8 mgd based on a new savings estimate method the City plans to adopt (new method explained below). Overall, a cumulative total of 4.3 mgd of flow reduction has been achieved over the 3.5 years of the 5-year period using the original savings estimates and 3.03 mgd using the new savings estimate.

As reported in the July 2000 *CBS Report* update, the original numbers (e.g. 30 gpd per ULFT for single family dwellings) used to estimate flow savings from different water conservation programs primarily originated in research performed locally and in Southern California in the early 1990s. However, the California Urban Water Conservation Council Memorandum of

Table 2: ULFTs Retrofitted and Flow Reduction⁶

	# ULFTs		FI	ow Reduction (gpd)	
Fiscal Year 00/01 Goal	Fiscal Year 00/01 to Date	Program Total (FY 97/98 to Date)	Fiscal Year 00/01 Goal	Fiscal Year 00/01 to Date	Program Total (1997 to Date)
31,600	5,362	92,449	1,449,600	132,439	3,618,718

The total flow reduction for water conservation programs reported in the July 2000 CBS Report understated program accomplishments because some outstanding program activity was not processed in time for this report.

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⁶ All tables use the original savings estimates. For a comparison using the newer MOU saving estimates, see Appendix B.

Understanding (MOU) on Water Conservation Best Management Practices (BMPs) now uses different numbers (e.g. 18.9 gpd per ULFT for single family dwellings) for its savings estimate. Since most other agencies use this saving estimate, the City will adopt the MOU numbers with future revisions of the South Bay Action Plan. This move will make the City's flow savings estimates consistent with those used by other water conservation programs statewide. The savings estimates for ULFTs, provided in Tables 2 and 7 and through out the "Indoor Water Conservation" section, use the original method. Because the City's flow savings goals are based upon the original savings estimates, a table in Appendix B includes a comparison of flow savings utilizing both types of saving estimates. Table 2 summarizes the savings estimates for all ULFT retrofit programs for first half of fiscal year 2000/2001.

The City is continuing its cost sharing relationship with the Water District through which each supporting the other's water conservation programs financially and with marketing support. The Water District is replacing its ULFT Rebate Program with two new programs. One program is a toilet distribution program in which single-family dwelling residents and small multi-family dwelling owners can pick up free toilets and install them themselves. The other program is the Fee for Service Program. The Water District's Distribution and Fee for Service Program goals (within the Plant's service area) are 6,000 to 7,200 to 3,500 toilets, respectively. Contractors have been selected by the Water District to administer these programs.

The City will be contributing \$25 per toilet to each of these programs. Additionally the City may provide marketing support to the MFD program.

The Water District also intends to offer a Full Service Commercial toilet retrofit program, targeted at restaurants, large wholesalers and food-stores. These sectors exhibit higher per toilet savings than other commercial establishments, based on estimates from the 1997 CII (Commercial, Industrial, and Institutional) ULFT Savings Study by Hagler Bailly Services. This study breaks down the very broad CII sector down into 14 subsectors with daily savings estimates between 16 and 57 gpd to better identify business types with larger water savings potential. The City is currently using a blanket savings estimate of 48 gpd for the entire CII sector, which is at the high end of the spectrum provided in the study. The goal for this program is 750 toilets. The Plant will be contributing \$115 per toilet to this program as well as marketing support.

I-C1 ULFT PROGRAMS

Single-Family and Multi-Family Dwelling Pilot Distribution Program

The City helped the Water District to effectively design their new ULFT distribution programs by collecting data from three ULFT distribution pilot events. At the event in June 2000 the City distributed approximately 290 toilets to residents with an associated

flow savings of 8,800 gpd⁷. Two additional distribution events, held on August 5 and September 29, 2000, resulted in the distribution of an additional 1,027 toilets.

The Single-Family and Multi-Family Dwelling Pilot Distribution Program demonstrated that distribution is a relatively inexpensive, yet effective method of getting ULFTs to single-family residents in San José. Although the program was made available to small MFD residents, it was found that distribution events were, for the most part, more problematic for these property owners, if they were dealing with more than a few toilets. Longer recycling turn around times and on-site delivery of toilets could be more effective options when dealing with this housing sector in the future.

I-C1.1 ULFT REBATE PROGRAM

As reported in the *July 2000 CBS*, the City and the Water District concluded the 1999 ULFT Rebate Program that offered \$75 rebates.

I-C1.2 COMMUNITY PARTNERSHIP PROGRAM (CPP)

Designed to target "hard-to-reach" communities such as low-income, disabled, and elderly homeowners who are unlikely to otherwise retrofit their older toilets, this program provides free installation, associated hardware, recycling of replaced toilets, and one year follow-up service for both parts and labor. This program has been expanded to include the entire Plant service area with a goal of 7,500 toilet installations for fiscal year 2000-2001. Table 3 shows the number of toilets and the associated flow reduction for this program.

Table 3: CPP ULFTs and Flow Reduction⁷

	# ULFTs		FI	ow Reduction (gpd)	
Fiscal Year 00/01 Goal	Fiscal Year 00/01 to Date	Program Total (FY 97/98 to Date)	Fiscal Year 00/01 Goal	Fiscal Year 00/01 to Date	Program Total (1997 to Date)
7,500	1,398	41,349	225,000	41,940	1,542,655

I-C1.3 MULTI-FAMILY DWELLING (MFD) Voucher Program

The City's MFD Voucher Program ended prior to the *July, 2000 CBS Report*. Table 4 summarizes the flow reductions for this program. However, several outstanding participants that signed up prior to the end of the fiscal year concluded their projects after the July 2000 report. The conclusion of these remaining installations resulted in an additional 683 ULFT installations. An additional 14 ULFTS of the remaining installations are still outstanding at this time and will be included in the July 2001 *CBS Report* flow reduction numbers.

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⁷ Based on original saving estimates

Table 4: MFD Voucher ULFTs and Flow Reduction⁷

	# ULFTs		F	Flow Reduction (gp	d)
Fiscal Year 00/01 Fiscal Year 00/01 Program Total Goal to Date (FY 97/98 to Date)		Fiscal Year 00/01 Goal	Fiscal Year 00/01 to Date	Program Total (1997 to Date)	
0	677	20,311	0	37,700	1,142,815

I-C1.4 COMMERCIAL, INDUSTRIAL, AND INSTITUTIONAL (CII) ULFT PROGRAM

Table 5 summarizes the savings for the CII ULF Program. This program includes the City Facilities Program as well as the CII Voucher Program. The City Facilities Program retrofits selected municipal facilities with ULFTs. San José has completed the retrofit of all City facilities. The program has turned its focus to the retrofit of toilets in other tributary municipal buildings. Of the seven tributary cities, Monte Sereno reports having completed all retrofits; Los Gatos, Saratoga, Campbell and Cupertino have indicated interest, and Santa Clara and Milpitas have not decided. The deadline to participate was at the end of December 2000, with the retrofit work to be completed by December 2001. The program offers full retrofit services, providing the hardware and labor to replace older, high flow toilets with ULFTs and a portion of the recycling costs.

Table 5: CII ULFTs and Flow Reduction⁷

	# ULFTs			Flow Reduction (gpd	1)
Fiscal Year 00/01 Goal	Fiscal Year 00/01 to Date	Program Total (FY 97/98 to Date)	Fiscal Year 00/01 Goal	Fiscal Year 00/01 to Date	Program Total (1997 to Date)
500	73	3,443	24,000	3,504	165,264

The CII Voucher Program also offers from \$100 to \$150 per toilet to businesses The City and the Water District have divided up the CII toilet market to better meet the needs of each target sector. The Water District will target businesses such as restaurants, wholesale facilities (e.g. Costco), and other establishments with high occupant/restroom ratios with a full service installation program they plan to start in January of 2001. The City will continue to offer the CII voucher program to all other CII sectors, and as a complementary program offered to businesses that participate in the Water Efficient Technologies Program.

I-C1.5 SMALL MFD PROGRAM

This MFD Voucher Program was replaced with one that targets the many owners and managers of small MFD complexes (containing up to 50 units). These people, having little time to manage a toilet retrofit project on their own,

were not targeted in the previous MFD Voucher Program. For a \$15 fee, the program provides a new toilet, associated hardware, installation, and recycling of all replaced toilets, as well as one-year follow-up service for both parts and labor. The goal for fiscal year 2000-2001 is the installation of 9,700 toilets, with an option to extend through August 2001 for an additional 4,500 toilets. Because the contractor is having marketing and other difficulties in meeting current goals for this program, we are considering reducing the Small MFD Program's 9,700 toilet replacement goal by 2000 toilets and increasing the toilet replacement goal (and the accompanying resources) of the SFD-FFS Program, discussed below, by 2000 toilets.

Table 6: Small MFD Retrofits and Flow Reduction⁷

	# ULFTs		Flow Reduction (gpd)		
Fiscal Year 00/01 Goal	Fiscal Year 00/01 to Date	Program Total (FY 97/98 to Date)	Fiscal Year 00/01 Goal	Fiscal Year 00/01 to Date	Program Total (1997 to Date)
9,700	115	115	679,000	8,050	8,050

I-C1.6 SINGLE FAMILY DWELLING FEE-FOR-SERVICE (SFD-FFS) PROGRAM

This program is designed for single-family homeowners who were not eligible for the CPP. The SFD-FFS Program provides, at a cost of \$50 per toilet, installation of a new ULFT and associated hardware, recycling of replaced toilets, and one-year follow-up service for both parts and labor. We are considering shifting 2000 toilets (and the accompanying resources) from the toilet replacement goal for the Small MFD Program, as described in the section above, to the to the SFD-FFS Program. This shift will increase the SFD-FFS Program toilet replacement goal to 3,000 toilets.

Table 7: SFD FFS and Flow Reduction⁷

	# ULFTs			Flow Reduction (gpo	1)
Fiscal Year 00/01 Goal	Fiscal Year 00/01 to Date	Program Total (FY 97/98 to Date)	Fiscal Year 00/01 Goal	Fiscal Year 00/01 to Date	Program Total (1997 to Date)
1,000	337	337	30,000	10,110	10,110

I-C2 WATER EFFICIENT TECHNOLOGIES

Water Efficient Technologies (WET) provides rebates of up to \$50,000 per project to companies that implement equipment and process changes to reduce the amount of discharge to the sanitary sewer. Rebate amounts are based on the amount of flow reduction garnered from a project, at a rate of \$4 per ccf/year of flow savings.

Program progress for this reporting period has been slow but does include some noteworthy highlights. A diner completed a project for new equipment that will save

the diner nearly 500 gpd. While the savings may be small compared to projects from industrial customers, this is the first commercial application in two years. More recently, Sanmina Corporation (formerly Hadco), a printed circuit board manufacturer, has applied upgrades to three DES (develop, etch, strip) lines for an additional savings of approximately 75,000 gpd. This project is complete and the rebate will be issued shortly.

In addition to the completed projects, a number of projects are in progress. Currently, there are 16 projects outstanding with a total potential flow reduction of 0.40 mgd. Two large projects have been completed but remain as outstanding applications because of the need for project documentation or difficulties in obtaining permits.

Table 8: WET Applications Completed And Flow Reduction

# Completed A	oplications	F	Flow Reduction (gpd)	
Fiscal Year 00/01 to Date	Program Total (FY 91/92 to Date)	1		Program (1991) to Date
2	53	300,000	732	928,000

I-C3 OTHER CONSERVATION PROGRAMS

I-C3.1 HORIZONTAL AXIS WASHER REBATE PROGRAM

Since 1998, the City has co-funded the Water District's participation in the Horizontal Axis Washer Rebate Program offered by PG&E. Washing machines are second only to toilets as the highest water-use appliance in the household. This program offers customers a rebate toward the purchase of water- and energy-efficient appliances. A summary of sales for the reporting period is shown in the table below. In January 2000, PG&E lowered their rebate amount from \$100 to \$75 per machine. In order to maintain a combined program incentive level of \$175, the City increased its participation from \$25

Table 9: Residential Washer Distribution And Flow Reduction

# Residential Washer	rs .	Flow Reduction	(gpd)		
Fiscal Year 00/01 Goal	Fiscal Year 00/01 to Date	Program Total (FY 97/98 to Date)	Fiscal Year 00/01 Goal	Fiscal Year 00/01 to Date	Program Total (1998 to Date)
4,000	1882	10,964	58,400	27,477	160,074

to \$50 per rebate for the FY 00/01. The current PG&E program concluded in December 2000, at which time the total rebate available went down to \$100 per machine. PG&E may restart its contribution again in April 2001.

I-C3.2 WATER-WISE HOUSE CALLS

In conjunction with local water retailers, the Water District performs residential water surveys called "Water-Wise House Calls" as a part of their residential conservation program. The program is available for single-family and MFD homes. The surveys consist of inventory and measurement of flow rates for water-using fixtures, leak-detection, and the distribution of low flow devices where appropriate. Since toilet flappers (the rubber stopper, that is located in the bottom of the toilet tank) are responsible for the majority of indoor water leaks, residential water surveys are being used as a vehicle for their replacement.

The Water District has found it challenging to motivate residents to participate in the survey program. Therefore, the Water Efficiency Program provided a movie ticket incentive to increase the participation of single-family and MFD owners. The incentive targeted the top 20 percent of water users, based on winter water use data. The Water District was unable to procure the flappers in time to utilize them with the movie ticket offer. By the time they arrived, the Water District had developed concerns about installing them and decided to hold off on installation until they hire a contractor to administer the program (anticipated in Spring of 2001). In the meantime, the flappers are being distributed for homeowners to install themselves if they so choose.

I-C3.3 COMMERCIAL WASHER PROGRAM

Additionally, the Water District administers a Commercial Washer Program to provide \$250 rebates to commercial Laundromats, nursing facilities, and to multi-family residential buildings with common-area laundry rooms. The City helps fund this rebate offer by reimbursing the District \$125 per replaced washer for commercial installations and \$75 per washer for multi-family installations. This program started slowly due to turnover at the Water District and the lack of a real marketing effort. The program is receiving greater attention from new Water District staff and, with the added eligibility of the multi-family common area laundries, should perform better during the remainder of the fiscal year.

Table 10: Commercial Washer Voucher Distribution And Flow Reduction

;	# Commercial Washers	3	Flow Reduction (gpd)				
Fiscal Year 00/01 Goal	Fiscal Year 00/01 to Date	Program Total (FY 97/98 to Date)	Fiscal Year 00/01 Goal	Fiscal Year 00/01 to Date	Program Total (1998 to Date)		
1,000	59	70	36,000	3,250	4,042		

I-C3.4 SUBMETERING PROGRAM

The Water District continues to offer a Submetering Program for Mobile Homes. The pilot effort for this program ended in May 2000, with the installation of 433 submeters in one mobile home park. Flow savings estimates for this pilot program are not yet available.

The program offers rebates to mobile home customers for the installation of sub-meters that allow end users of water to be billed for the volume of water they use, potentially reducing water consumption by 25%. The City contributes to this program by reimbursing the Water District up to \$27 per submeter.

Next Steps

To further understand water wasting toilet leaks, the City is conducting a flapper survey during the winter. The survey is to gather information about previous toilet program participant's behavior in relation to their toilet flappers and use of in-tank toilet bowl cleaners. The use of some in-tank "drop-in" cleaners may cause damage to the toilet's flapper valve, which may cause the toilet to "run" when water leaks from the tank to the bowl. Prolonged use of these cleaners may cause the toilet to be less water efficient.

Additionally, City is investigating the feasibility of developing ordinances such as one requiring ULFT retrofit upon the resale of a home. The City will also investigate new technologies for their flow reduction potential and feasibility of implementation. These include hot water on-demand systems that eliminate the need to run tap water to get hot water from the water heater and new toilets that use less water for flushing than the 1.6 gallon ULFTs currently in use.

We anticipate continuation of our ULFT programs as well as our partnership with the Water District.

It should be noted that the City will be providing a table to correct actual program achievement unit estimates (i.e. number of toilets) provided in immediately preceding reports. This is necessary because not all program activity is finalized at the time the *CBS Report* goes to press. See Table 15 in Appendix B.

I-D GROUND WATER INFILTRATION REDUCTION

In the July 2000 *CBS Repor*t, the City identified eight leaky manholes in one of San José's sewer basins. City departments are working together to design a rehabilitation method for sealing the manhole leaks. The City is also reviewing the *Basin Rehabilitation Strategic Plan* submitted by West Valley Sanitation District. The City plans to work with West Valley Sanitation District to resolve dry weather infiltration issues based on the findings of this plan.

I-E MARSH MITIGATION

The City's contribution towards the purchase of the Baumberg Tract, the Moseley Tract, and Bair Island has made it possible for the City to fulfill its marsh mitigation requirement.

I-E1 BAUMBERG TRACT

A final update for this element was included in the July 1999 CBS Report.

I-E2 MARSH MITIGATION PROJECT - MOSELEY TRACT

Due to difficulties addressing joint use issues with Caltrans, the City is currently assessing salt marsh mitigation alternatives to the Moseley Tract.

I-E3 BAIR ISLAND

A final update for this element was included in the July 1999 CBS Report.

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II POLLUTANT REDUCTION

To reduce pollutants to the South Bay, the City uses a multi-pronged, continuous improvement approach involving infrastructure optimization, pretreatment programs, partnerships with industry, and special studies. The goal is to ensure that programs are efficient, cost-effective, and based on science. Regional cooperative programs, including the Santa Clara Valley Urban Runoff Pollution Prevention Program (Urban Runoff Program) and the Santa Clara Basin Watershed Management Initiative (WMI), are also key elements in achieving this goal.

II-A SJ/SC WATER POLLUTION CONTROL PLANT

The Plant exceeded NPDES discharge limits six times for zinc and one time for tributyl tin between July and December 2000.

On September 5 and December 19, 2000 effluent zinc concentrations of 102mg/l and 91 mg/l were reported. In the same period, the Plant experienced significant high zinc loading for the months of September, October, November and December. The Plant reviewed treatment plant operational practices, sampling protocol, laboratory procedures and potential industrial sources and determined that this significant increase in zinc loading since March of 2000 is the result of increased zinc dosage by the Water District for corrosion control to meet the Safe Drinking Water Act requirements. Along with these investigative efforts, increased monitoring of the Plant's influent and effluent streams for total and dissolved zinc to better characterize this phenomenon is continuing. The City will continue collaborating with the Water District and Regional Board staff to resolve this situation expeditiously.

On December 22, 2000 effluent tributyl tin concentrations of 23 ppt was reported. The Plant is reviewing point sources data to determine if the source was from industrial dischargers. Concurrently, a request has been made to the contract laboratory that performed the analysis to review their quality control and assurance data to verify the accuracy of the result. The January 2001 compliance sample for tributyl tin has also been expedited for analysis.

To better characterize pollutants entering the Plant, the following studies were initiated:

- Develop an appropriate methodology to quantify flows and concentrations to the Plant from various sectors;
- Identify and evaluate potential sources of organochlorine pesticides, PCBs, and dioxins in the Plant's influent;
- Trace pollutant sources and characterize sanitary sewer drainage basins; and
- Identify source control and pollution prevention opportunities.

II-A1 OPERATIONS AND MAINTENANCE MANUAL

The updated Operation and Maintenance Manual was submitted to the Regional Board in June 2000 as reported in July 2000 *CBS Report*.

II-A2 HEADWORKS LOADING ANALYSIS WORKPLAN

Final report included in July 2000 CBS Report.

II-A3 SELECTED ORGANICS SOURCE INVESTIGATION

Final report included in July 2000 CBS Report.

II-A4 TRUNKLINE AND UPSTREAM MONITORING

In October 1995, the City developed and implemented a Trunkline and Upstream Monitoring Program focused on tracing pollutants upstream from the Plant to their source. See Figure 2 for monitoring locations.

Findings and Accomplishments

Figures 3 through 6 show the average daily mass loading for the five trunklines entering the Plant for the current and previous nine reporting periods.

Figure 3 shows the average daily loading of total copper at each of the trunklines. Total copper loading at headworks decreased slightly from the previous period. Significant reductions are seen at T-1 and U-SC2 due to a decrease in the frequency of extreme values. This decrease may be due to the knowledge of increased monitoring in those areas. Higher copper concentrations and loading at T-2 and T-3 offset most of the reduction, resulting in a moderate decrease in copper loading.

Figure 4 shows the average daily loading of dissolved copper at each of the trunklines. Current dissolved copper loading at headworks decreased significantly due to a 50% reduction in dissolved copper in the main trunkline from San José, Santa Clara and West Valley Sanitation District (T2). Dissolved copper loading appears to have returned to the lower levels seen prior to January 1999. No cause was identified for the increasing dissolved copper concentrations between January 1999 and May 2000.

Figure 5 shows the average daily loading of total nickel at each of the trunklines. Total nickel loading has increased 32% from the previous period primarily due to increased loading at T-2. The average nickel concentration at T-2 is 12 ug/l for the current period, an increase of 3.4 ug/l from the previous period average of 8.6 ug/l.

Figure 6 shows the average daily loading of dissolved nickel at each of the trunklines. Dissolved nickel loading has increased 23% and shows a trend similar to total nickel.

Next Steps

The City is evaluating the Trunkline and Upstream Monitoring Program to improve its utility for finding sources of pollution. For instance, T2 collects wastewater from such a large watershed that it is almost impossible to narrow down sources from its data. However, the Program has been useful for the determining sources for smaller watersheds. We are also considering adding additional criteria for monitoring such as zinc. In the meantime, the Trunkline and Upstream Monitoring Program will continue

to monitor the five trunklines to track changes in pollutant concentrations, particularly for the increases in total and dissolved nickel from the San José, Santa Clara, and West Valley Sanitation District trunkline. Program data will be used to support surveillance, inspection, and outreach efforts.

II-A5 PLANT STUDIES

A final update for this element was included in the January 2000 CBS Report.

Figure 2: Trunkline Monitoring Locations

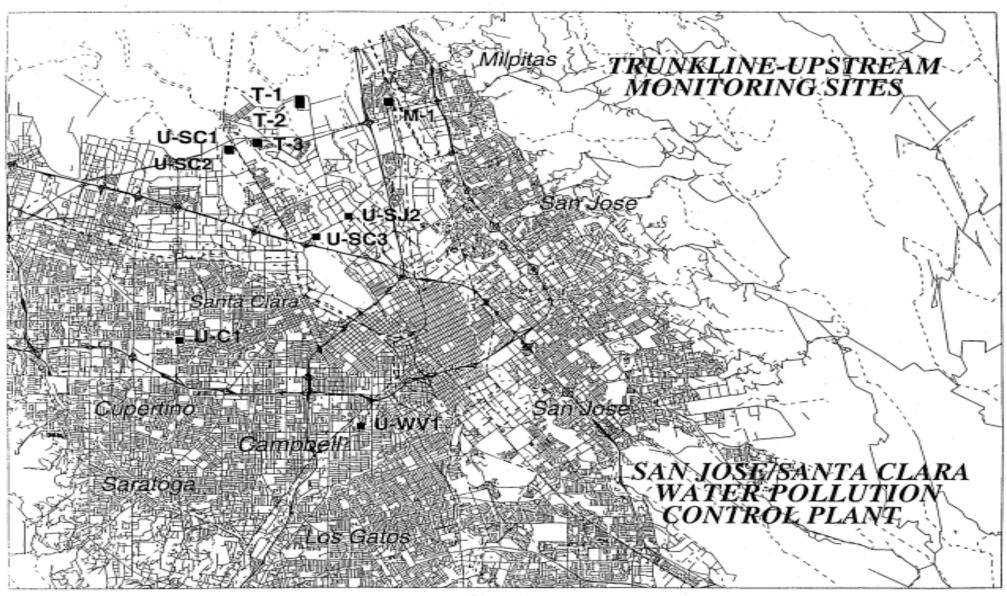


Diagram A

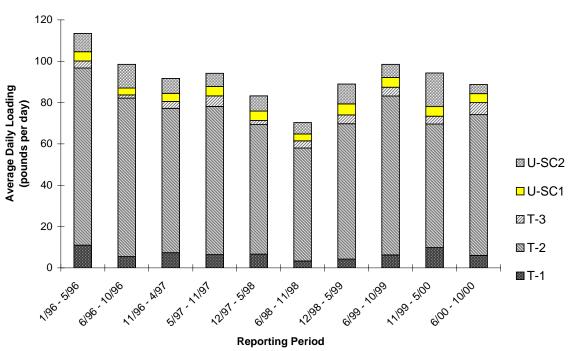
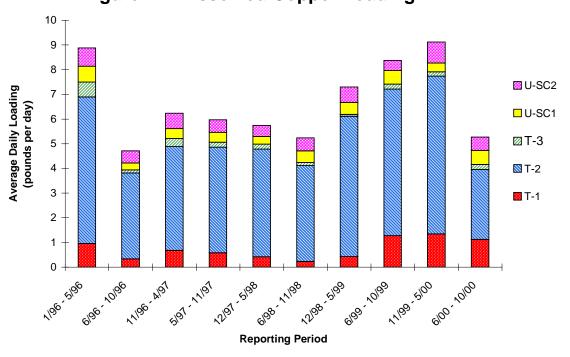


Figure 3: Total Copper Loading by Trunkline





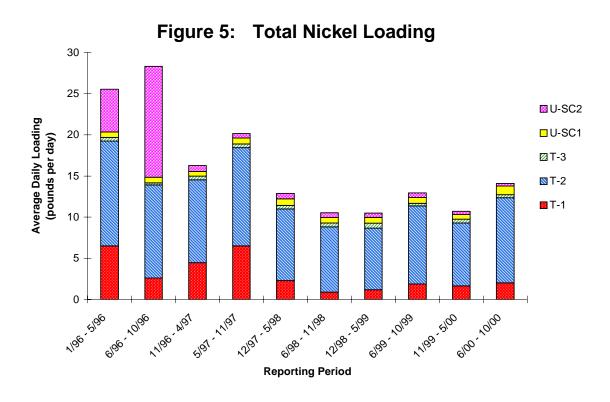
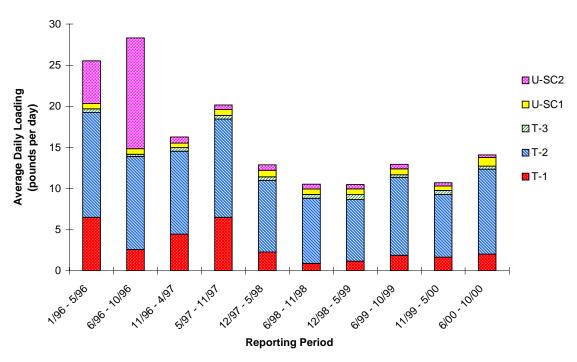


Figure 6: Dissolved Nickel Loading



II-B THE PRETREATMENT PROGRAM

The City's Pretreatment Program regulates industrial dischargers and other critical users and encourages pollutant and flow reduction. The *Development Application Review* Group continues to provide significant input into the City's development application review process. Partnerships with industry have encouraged dischargers to develop and evaluate innovative pollutant reduction techniques.

II-B1 INDUSTRIAL WASTEWATER DISCHARGE MUNICIPAL CODE

As discussed in previous reports, the City of San José has amended its municipal code definition of "Critical User." The expanded definition refers to any discharger discharging more than 100,000 gpd and requires that a wastewater discharge permit be issued to these dischargers. The associated discharge permit fee is currently under review with the Office of the City Attorney.

There were no other changes to the ordinance in 2000.

II-B2 DEVELOPMENT APPLICATION REVIEW (FORMERLY THE NEW INDUSTRY/DEVELOPMENT PROGRAM)

The Development Application Review Group consists of representatives from all of ESD's programs and services. The Group reviews development projects in San José during the planning process to identify and address issues that might affect environmental programs. The developer's attention is directed to discharge requirements and service considerations that should be addressed during site design. Wastewater discharge reduction, pollutant load minimization, onsite reuse, and the use of recycled water are some of the considerations included in evaluating new development projects.

Findings and Accomplishments

For this reporting period, the group reviewed and responded to the following:

- 6 Administrative Draft Environmental Impact Reports (EIRs),
- A Final Staff Assessment from the California Energy Commission on the Metcalf Energy Project to construct a power plant in South San José,
- A Notice of Preparation of an EIR for the City of Milpitas's project to redevelop significant sections of its midtown area,
- 89 development applications identified for potential wastewater pollutant and/or flow reduction measures, and
- 87 development applications identified for potential use of recycled water.

Next Steps

In the coming months, the Group will develop a workplan to identify ways of assessing the implementation of recommended conditions and measures related to water efficiency and pollutant reduction. The Group will also modify the comment-and-review process in accordance with the City of San José's transition to a web-based development review process and tracking system. Once the Development and Review Process is fully executed in San José, the Group will seek to expand the scope of work to include other tributary cities.

II-B3 INDUSTRIAL DISCHARGER RESEARCH STUDIES

Final report included in July 2000 CBS Report.

II-B4 INDUSTRIAL POLLUTANT LOADING STATUS

Table 11 shows the industrial flows for 1997 (baseline) through 2000, as well as copper and nickel loading to the Plant from permitted industrial dischargers. Figures 7-10 illustrate the trends in copper and nickel loading and flow.

Table 11: Industrial Flow and Copper & Nickel Loading

Discharger	Cu, Ibs/day				Ni, Ibs/day			Flow, mgd				
	1997	1998	1999	2000*	1997	1998	1999	2000*	1997	1998	1999	2000*
Group 1	5.24	4.27	6.48	5.14	2.51	1.47	1.63	1.36	2.76	2.29	2.53	2.57
Group 2	3.52	3.51	2.10	2.42	3.82	3.48	3.20	2.98	9.81	8.97	8.99	7.69
Group 3	0.03	0.02	0.03	0.02	0.03	0.01	0.02	0.01	0.03	0.03	0.04	0.05
Total	8.79	7.80	8.61	7.58	6.36	4.96	4.85	4.35	12.60	11.29	11.56	10.31

^{*}December 1, 1999 - November 30, 2000

Findings and Accomplishments

Permitted Industrial flow and copper and nickel loading continue to be below 1997 baseline levels. In 2000, we saw the largest reductions of all three parameters since 1998. Note, however, that industrial loading is cyclic and variable in nature due to company closures, process changes, and company start-ups.

Group 1 Dischargers have reduced the levels of copper and nickel discharges to below the 1999 highs as seen in Table 11. Some of this can be attributed to process efficiencies implemented at several printed circuit board companies. Group 2

Discharger flows are down by 1.3 mgd. There have been numerous company closures, some of them discharging 350,000 – 400,000 gpd. We anticipate permitted industrial flows to increase in 2001, due to both company start-ups and the addition of companies such as hospitals and hotels that were permitted as a result of the definition change for "critical user" in the *Industrial Discharge Municipal Code*. There are at least eight of these non-industrial facilities, discharging more than 100,000 gpd that will be accounted for in the next report. These dischargers are not regulated for copper and/or nickel, but for flow only. Therefore, their inclusion will not affect metals loading numbers.

Next Steps

The City will continue to monitor pollutant loading from IUs to maintain levels below the 1997 baseline. (For details of flow reduction measures, refer to Section I-B of this report.)

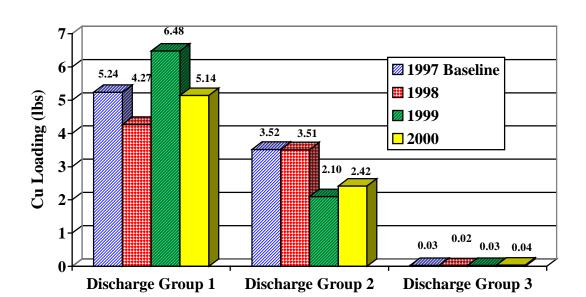
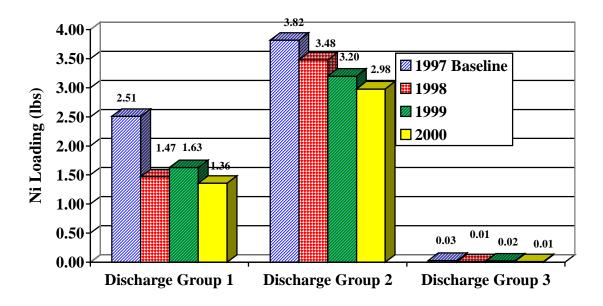


Figure 7: Daily Total Industrial Copper Loading

Figure 8: Daily Total Industrial Nickel Loading



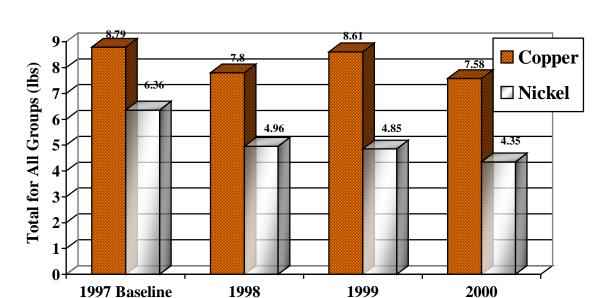
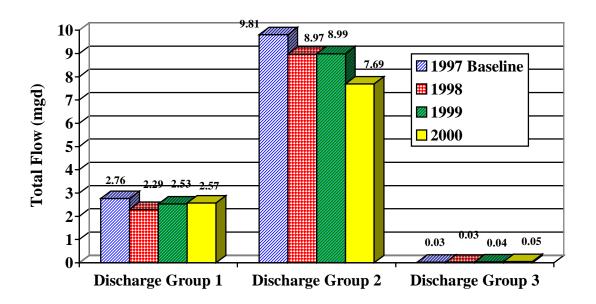


Figure 9: Daily Industrial Total Copper and Nickel Loading





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III RESEARCH AND SPECIAL STUDIES

With a goal of collecting additional data that will further scientific understanding and support scientifically based regulatory decisions in the future, the City has been involved in several local and regional research studies. Each study is described in greater detail below.

III-A SPECIAL EFFLUENT STUDY FOR CERTAIN ORGANIC POLLUTANTS

The purpose of the *Special Effluent Study For Certain Organic Pollutants* is to determine the concentrations of organic pollutants in treatment plant's effluent using analytical techniques with the appropriate sensitivity, and to assess the sources of variation in complex trace analytical sampling and analysis. Although all of the sampling is completed, due to the complex nature of the analysis, securing data from the participating laboratories will require additional time beyond the final submittal date of January 31, 2001 given in the Regional Board's workplan. As a result of these unavoidable delays, the San Francisco Estuary Institute has proposed a revised timeline for the study, which is being considered by the Regional Board.

The following is the proposed timeline revision:

December 15, 2000 Final data submission from lab

January 5, 2001 All data confirmed and validated

January 15, 2001 Draft report submitted for review

February 15, 2001 Review and comments from Publicly Owned Treatment Works

(POTWS) completed

February 25, 2001 Final report submitted to POTWs

The final report will be included in the July 2001 CBS Report.

III-B MERCURY TMDL PARTICIPATION PLAN

The City continues to participate in the Regional Board's Mercury Council, representing both the City and the Bay Area Dischargers' Authority Laboratory Committee. The City is also represented on the Council through the Urban Runoff Program. In addition to this Bay-wide effort, City staff is participating in the Santa Clara Basin WMI, which serves as the stakeholder forum for the Guadalupe Watershed Mercury Total Maximum Daily Load (TMDL) effort. For this reporting period, Plant effluent monitoring for total mercury averaged 3 parts per trillion (ppt), well below the Plant's NPDES limit of 12 ppt.

Next Steps

The City will continue its participation in local and regional TMDL efforts throughout 2001.

III-C SPECIAL WATER OUALITY STUDIES

Monitoring of water quality parameters and the development efforts for characterizing copper and nickel in the South Bay have fostered a better understanding of the beneficial uses of the South Bay.

III-C1 TRACE LEVEL MONITORING IN SOUTH SAN FRANCISCO BAY

The City continues to monitor water quality parameters monthly in the South Bay at 12 sampling sites representing deep channel, mid-channel, shallow mudflats, and areas of significant stream influence. The study provides indispensable information describing the spatial and temporal trends in water quality that enable a better understanding of beneficial use impairments in the South Bay.

Findings and Accomplishments

Study results affirm that ambient total metal concentrations in the extreme South Bay decrease on a northward gradient. Information on mercury in the South Bay from this study will be useful in developing the Mercury TMDL for San Francisco Bay. This water quality monitoring program will continue throughout 2001.

Next Steps

The Copper Action Plan resulting from the South Bay Copper/Nickel TMDL process recommends continued monthly monitoring of these stations, using dissolved copper concentration as an indicator for copper levels in the South Bay. The Nickel Action Plan concluded that monitoring total and dissolved nickel in the South San Francisco Bay should also be performed on a monthly basis. A copy of the Copper and Nickel Action Plans are included in Appendices C and D, respectively.

III-C2 CALCULATION OF TMDL FOR COPPER AND NICKEL IN SOUTH SAN FRANCISCO BAY

During the July 2000 to January 2001 period the emphasis has been on the completion of the *Copper and Nickel Action Plans*, implementing the TMDL results through the regulatory process, and preparing a summary of the TMDL process for the WMI.

Findings and Accomplishments

<u>Copper and Nickel Action Plans</u> – These documents (see Appendices C and D) define actions that will be implemented in NPDES permits to ensure maintenance of existing water quality, protection of beneficial uses, and prevention of exceedances of site-specific water quality objectives for copper and nickel in the South Bay. The *Copper and Nickel Action Plans* were approved by the Copper and Nickel TMDL Work Group formed by the WMI and the Bay Monitoring and Modeling Subgroup of the WMI. These documents were produced in both paper and electronic forms and have been widely distributed.

Watershed Management 2000 Conference

Two papers on the Copper and Nickel TMDL Process in the South Bay were presented at the Watershed Management 2000 Conference, July 9-12, 2000, in Vancouver, British Columbia.

Summary Report

A Summary Report on the Copper and Nickel TMDL Work Group Activities (see Appendix E) was submitted to the Bay Monitoring and Modeling Subgroup of the WMI Core Group on October 4, 2000. This document summarizes the TMDL process, final decisions, and the outcome of the group's activities.

Regulatory Actions

Based on the findings of the TMDL process, the Regional Board found that the Lower South Bay is not an impaired water body for copper and nickel (Order No. 00-109, October 18, 2000). The Regional Board opened the Plant's NPDES permit to include these findings and the *Copper and Nickel Action Plans*. The intent of the Regional Board is to remove copper and nickel for the Lower South Bay from the 303(d) list of impaired water bodies the next time the list is updated (April 2002).

Update to Work Plan for the Bay Monitoring and Modeling Subgroup of the WMI

The Regional Board's regulatory actions resulted in approved amendments to the NPDES Permits for three South Bay POTW. These amendments included the requirement that POTWs develop and submit through the Bay Monitoring and Modeling Subgroup a schedule and workplan,. This submittal is to be part of an updated workplan for the subgroup, to conduct work necessary to assist the Regional Board in developing a site-specific objective for copper and nickel and preparing a basin plan amendment. This workplan update was submitted December 12, 2000 (see Appendix F).

Next Steps

We are awaiting input from the Regional Board before proceeding.

III-D SALT MARSH CONVERSION ASSESSMENT

Marsh conversion studies are progressing as scheduled. The full *Marsh Plant Association Report for 2000* is available on the City's Environmental Services Department (ESD) website (www.ci.san-jose.ca.us/esd) under "Publications and Research".

The preliminary results of the 2000 vegetative assessment indicate very little change in marsh habitat vegetation between 1999 and 2000, with slight increase in salt marsh habitat and small decrease in overall marsh in the form of brackish marsh habitat throughout the main study area. The reference area saw similar changes.

The first year of a two-year study of the water salinities and tidal elevations in Coyote Creek and Alviso Slough was completed. Initial findings from the three continuous monitoring stations included:

- Salinities decrease during falling and low tides (diluted by local sources of freshwater) and increase on rising and high tides (when local sources have a reduced dilution effect);
- Physical conditions at the railroad bridge (downstream of the Plant outfall into Coyote Creek) and the Alviso Slough Reference Reach showed similar characteristics, both in average salinities (approx. 4 parts per trillion (ppt)), and daily and seasonal salinity variations; and
- The channel marker station (at the mouth of Coyote Creek) showed significantly higher salinities than the other two stations, indicating that surface waters were well mixed and heavily influenced by Bay water at Calaveras Point.

The City also sampled and analyzed pore water salinity in the vegetative root zones throughout the Study and Reference Areas. Preliminary results from the three randomly selected locations within each of the 28 marsh segments (84 total) showed that:

- Salt marsh habitats had more saline pore water and higher mineral content than brackish or freshwater marsh habitats;
- Plant species mapped as indicators of salt marsh species had the highest mean interstitial salinities (35 ppt), and those mapped as indicators of freshwater marsh habitats were lowest (4 ppt); and
- Brackish marsh plant species habitats had mean interstitial salinities between salt and freshwater (20 – 35 ppt) and plants in this salinity zone usually have a large range of salt tolerances.

Next Steps

The analysis of this data and correlative analysis of the field study findings (with all of the South Bay freshwater input variables) will aid in determining the relative influences of environmental and anthropogenic factors affecting changes in marsh type. A specific work plan will be developed once the first two years of field monitoring data collection have been analyzed and discussed with stakeholders.

III-E STREAM FLOW AUGMENTATION PILOT PROJECT

Work began on this project following Regional Board approval of the *Revised South Bay Action Plan* in September 1997. In January 1998, City staff convened a stakeholder group consisting of local, state and federal resource agencies and environmental advocacy groups. This stakeholder group functions to assist in the design and development of the Stream Flow Augmentation Pilot.

The baseline monitoring program, to collect background scientific information on the Coyote Creek system, completed its second dry season sampling effort. Water quality, fisheries,

benthic invertebrate, and habitat data has been collected as a baseline for comparison with recycled water discharge characteristics. The baseline will assist in evaluating the impact SBWR recycled water may have on the stream water quality and aquatic habitat. This baseline data and subsequent monitoring of Coyote Creek also will also be used for other related projects that are ongoing in the Coyote Creek Watershed.

Thus far, the facilities site and the release point have been selected. California Environmental Quality Act compliance was completed when the City's Building, Planning, and Code Enforcement Department adopted the Negative Declaration on September 27, 2000. The Regional Water Quality Control Board approved the NPDES permit amendment on October 18, 2000. Immediately following the Regional Board's approval, permit applications were sent to the Water District, the California Department of Fish and Game and the National Marine Fisheries Service. Once the project receives all required environmental permits, the process of purchasing and installing capital equipment will begin as well as construction in the public right-of-way. The Pilot is tentatively scheduled to begin stream flow augmentation in late summer of 2001 or early in 2002.

The Santa Clara Basin Watershed Management Initiative (WMI) regulatory subgroup served as a forum for reaching agreement on NPDES permit language. We will work with them again to develop the monitoring and contingency plans required to be approved by the Regional Board's Executive Officer before water releases can begin. Copies will be made available upon request.

III-F WETLANDS CREATION PILOT PROJECT

A wetlands creation pilot project using recycled water is being conceptualized as one of the environmental enhancement projects under the *Revised South Bay Action Plan*. The primary benefits of a wetlands creation pilot project include aesthetic value, habitat enhancement, and public education. This pilot project will be developed more fully when the stream flow augmentation pilot(s) have demonstrated some initial positive results. Identification of potential location(s) and site specific designs should be developed within 6 to 12 months following the success of the stream flow pilot. A stakeholder process will be used to further develop this pilot project concept at that time.

III-G AVIAN BOTULISM

During the period from June – November 2000, the San Francisco Bay Bird Observatory (SFBBO) monitored Artesian Slough, Coyote Creek, and Alviso Slough for the presence of avian botulism and other avian diseases. The SFBBO conducts this special monitoring program under contract to the City. This study is part of a long-term monitoring program begun in 1982. Prompt collection and treatment of ill birds in conjunction with collection and disposal of deceased animals in the surveyed areas facilitates the detection and control of disease outbreaks. There was no outbreak of avian botulism during the 2000 monitoring period. As in 1999, the group of birds that showed the highest disease and mortality rate was seagulls. Monitoring for the next season will begin in June 2001. See Appendix G for the full report.

III-H LOCAL EFFECTS MONITORING

A final update for this element was included in the July 1999 CBS Report.

III-I BIOASSESSMENT OF SOUTH BAY

The fundamental purpose of conducting bioassessment/biocriteria studies in the lower South Bay is to cooperatively develop, with academic and regulatory communities, bioassessment techniques that could lead to site-specific environmental indicators for the South Bay.

The Executive Officer of the Regional Board approved a requested time extension from the requirement to commence work of a previously submitted bioassessment study in correspondence dated February 29, 2000. The City used this extension to discuss alternatives to bioassessment studies with Regional Board staff and other interested stakeholders, including a schedule and timeline to amend our NPDES permit requirements.

Findings and Accomplishments

The City has discussed bioassessment alternatives with Regional Board staff and local scientific experts from the United States Geological Survey, San Francisco State University, and the Regional Monitoring Program. Following these discussions, the City worked with marine scientists from San Francisco State University's Romberg Tiburon Center for Environmental Studies to produce the beginnings of a draft proposal to develop bioassessment techniques for the South San Francisco Bay's plankton community. In May 2000, Regional Board staff voiced support for proposed plankton studies and the development of a more detailed proposal.

The proposed work will be conducted over four years with an anticipated start date of June 2001, and at a cost approximating \$500,000 dollars. Staff anticipates the contract will be presented to City Council for approval in March 2001.

Next Steps

In addition to the phytoplankton bioassessment study, the City is funding a contract for an assessment of the health of the South Bay. The main objective is to consider various existing and on-going water quality, sediment quality, and biological data collection efforts in placing a numeric value on the health of the South Bay. A consortium of Bay Area scientists will conduct the proposed work. The proposed final report date is October 1, 2001 and the total contract cost is approximately \$27,500.

IV REGIONAL COOPERATIVE EFFORTS

The City is involved in a number of regional cooperative efforts including the Urban Runoff Program, the WMI, the Watershed Grant Program and the *Regional Monitoring Plan*. The primary goal of these efforts is to maximize efficiency and effectiveness by prioritizing issues and solutions and involving key stakeholders on a regional basis.

IV-A URBAN RUNOFF PROGRAM

The work of the City's Urban Runoff Program is closely coordinated with the countywide efforts conducted by the Urban Runoff Program as well as with the work of the WMI.

The Urban Runoff Program and each co-permittee, including the City of San José, are currently involved in active discussions with the Regional Board and other interested stakeholders regarding the proposed provisions of the 2000-05 Stormwater NPDES Permit. The WMI's Regulatory Subgroup is serving as the forum for the discussions. Permit re-issuance hearings are currently scheduled for late February 2001.

IV-B WATERSHED MANAGEMENT INITIATIVE

Since 1996, the City has been an active participant in the WMI, a stakeholder-driven process that strives to improve conditions of the South San Francisco Bay by addressing all sources of pollution that threaten the waterbodies draining into the Bay. One of the goals of the WMI is to develop a community-based *Watershed Management Plan* for the Santa Clara Basin, which will allow for better protection and sustainability of the South Bay's natural resources. This collaborative effort includes representatives from state and federal regulatory agencies; regional and local public agencies; business and industrial trade organizations; civic, environmental, resource conservation and agricultural groups; and the general public. The WMI is led by a policy-making body, the Core Group, and is supported by numerous subgroups and task-specific work groups. The City has committed significant staff and fiscal resources, as have the Water District, the cities of Sunnyvale and Palo Alto, and other stakeholders, to meet agreed-upon goals. City and tributary agency staffs are members of the Core Group and many subgroups.

Findings and Accomplishments

Since July 2000, the following has been accomplished:

Watershed Assessment Report

Three pilot watersheds, Guadalupe River, San Francisquito, and Upper Penitencia Creeks are being assessed using existing data. The results of that assessment will be the basis for the Watershed Assessment Report, Volume 2 of the overall Watershed Management Plan. The assessment will be used to determine the watershed's ability to support the appropriate beneficial uses including salmon/steelhead fisheries, rare and endangered animal and plant species, water contact recreation, water supply uses, and flood protection.

The City continues to provide significant resources for the development of the *Watershed Assessment Report* by contributing to funding for the assessment consultant as well as by providing staff resources and technical expertise. There is also a program website:

http://www.scbwmi.org/

A work group has been assembled to begin the planning stages for Volume 3, *Watershed Action Alternatives*. This volume will evaluate the results of the assessment and identify and develop possible actions.

Total Maximum Daily Load (TMDL)

Please refer to the "Special Studies", section IIIC, for an update on the TMDL effort for copper and nickel and to the "Mercury Participation Plan", section III B, for an update on the Guadalupe Watershed Mercury TMDL effort.

Vision Development

The Core Group developed a pictorial vision to illustrate how a model community would look in 2050 if the *Watershed Management Plan* were implemented. The City coordinated the development of the vision in partnership with the City of Palo Alto, who funded the artist. The next step is to incorporate the vision illustration into a brochure to communicate to the public the vision of the WMI. The brochure will also provide the community with contact information on how they can become involved with the WMI and various stewardship programs and activities throughout the Basin.

Regulatory Executive Forum

The Regulatory Executive Forum is intended to bring together high-level decision-makers from the regulatory agencies that oversee watershed activities in the South Bay. Attending agencies include the United States Environmental Protection Agency (U.S. EPA); the Regional Board; the Departments of Fish and Game and Fish and Wildlife; the Army Corp of Engineers; the cities of San José, Sunnyvale and Palo Alto; and the Water District. The Forum meets quarterly to track issues, regulations, and upcoming initiatives that may impact the local watershed. Recent discussions include the various South Bay permit and TMDL processes, the need for guidance on the 305(b)/303(d) listing process, the proposed expansion of the San Francisco and Oakland airports, and plans for South Bay marsh restoration.

Alum Rock Park

In February 2000, the Regional Board required the City to develop a *Stream-Riparian Corridor Management Plan* for Alum Rock Park. As a result, the City Departments of Public Works; Conventions, Arts, & Entertainment; and Environmental Services began developing a plan for managing and enhancing the creek banks. The *Stream-Riparian Corridor Management Plan* will include guidelines for managing stream bank erosion, stream protection, and stream bank repair that rely upon more natural looking materials (e.g., vegetation interplanted with rock instead of concrete sacks and walls), while protecting the road and park infrastructure.

The Stream-Riparian Corridor Management Plan, which is near completion, is being developed with the assistance of the WMI stakeholders, as the Upper Penitencia Creek watershed is one of the pilot watersheds for the Watershed Management Plan. This watershed is also the subject of the Water District flood control planning process in a downstream section of the creek. The Stream-Riparian Corridor Management Plan is now scheduled for completion in early 2001 and will provide the basis for Phase II Flood Damage Repair funded by FEMA as well as set out guidelines for ongoing maintenance to prevent further degradation of stream resources within the Park.

Facilitation Contract

The City has continued to fund a contract with MIG, Inc. for independent facilitation to the Core Group and Subgroups as needed, as well as to provide leadership on process issues, such as development of objectives for the WMI.

Riparian Restoration Action Plan

The City's Department of Planning, Building, and Code Enforcement has, with the assistance of a consultant, Jones and Stokes, Inc., prepared a draft *Riparian Restoration Action Plan*. The Action Plan is intended to promote and accelerate riparian restoration efforts in San Jose. The Action Plan was presented to the Transportation and Environment Committee on December 14 and will be considered for City Council approval on January 9. In conjunction with that effort, the WMI is using a grant from the U.S. EPA/Regional Board to conduct a pilot restoration project to test and refine the Action Plan. The goal is to develop transferable blueprints for urban creek clean-up, restoration and protection projects applicable throughout the Santa Clara Basin and the entire San Francisco Bay area. The pilot project will be located on a segment of Coyote Creek by the new William Street Park, East near downtown San José. An Advisory Committee comprised of members of the WMI, including City staff, the Water District, Santa Clara County, civic and environmental groups, is overseeing the effort. The committee has presented the project plans to the Olinder Neighborhood Association and, upon receiving the appropriate permits, will involve the nearby Olinder School.

Next Steps

The following summarizes the next steps for the WMI:

- Continue providing resources and support for Watershed Assessment Report,
- Incorporate the vision illustration into a brochure to communicate WMI vision,
- Continue participation in Regulatory Executive Forum,
- Complete Stream-Riparian Corridor Management Plan,
- Continue to fund contract for independent facilitation of Core Group and Subgroups, and
- Continue technical assessment of Riparian Policy and Riparian Restoration Action Plan.

IV-C WATERSHED GRANTS

The San José City Council approved the second year of the Watershed Grants Program for the Year 2000 at their April 18, 2000 meeting. The goals of the Watershed Grants Program are to:

- Foster and implement innovative solutions to local watershed problems,
- Encourage partnerships and joint ventures,
- Acquire new participants and challenge existing participants,
- Increase awareness of watershed issues, and
- Leverage resources.

The 2000-01 Request for Proposals was widely distributed, using several city mailing lists of neighborhood, civic and business organizations (500±) and the Santa Clara Basin WMI email listing. An announcement was also placed on the Environmental Services website and in the San José Mercury News. A pre-proposal meeting was held on May 3, 2000 with five attendees for the question and answer session. Proposals were due May 22, 2000.

Twenty-one proposals were received for this second year of the Watershed Grant Program. For the first year, ten proposals were received. Organizations that submitted proposals are listed in Table 12.

A proposal evaluation team assisted in the review of the proposals from May 23-June 6, 2000. The team consisted of the following:

City of San José Reviewers

- ESD:
 - Policy and Planning
 - ➤ Marketing and Communications
 - ➤ Water Efficiency
 - Watershed Protection
- Planning, Building & Code Enforcement Department:
 - ➤ Riparian Restoration

External Reviewers

- Community Foundation Silicon Valley
- U.S. EPA, Region IX
- Water District

Table 12: Watershed Grant Program Proposals

Proposer	Proposed Activity
San Francisco Bay Bird Observatory	Continuing field study of bird use of riparian restoration sites, overflow
	channels and other open habitats
San Francisco Bay Bird Observatory	Continuing participation in the WMI
Aquatic Outreach Institute	Conducting a "kids in creeks" workshop for 30 educators
Friends of Los Alamitos Creek	Restoring of native wild flora to Los Alamitos Creek/ revegetation project
San Francisco Estuary Institute	Supporting organizational involvement in the WMI
Natural Heritage Institute	Developing long-term plan for restoration and management of fisheries along Guadalupe Creek, Coyote Creek and Stevens Creek
Sustainable Conservation	Providing funding for an annual stakeholder meeting for the Brake Pad Partnership Project and use of an independent fate and transport scientist
Milpitas Foundation for Education	Providing a "Milpitas-specific" version of Kids in Creeks workshop to Milpitas Unified School District 10 elementary school science specialists
Park Pleasant Neighborhood Association.	Stopping the use of pesticides in area city park; educating neighborhood about the danger of pesticides, herbicides and household chemicals
Plata Arroya Eastgate Neighborhood Association	Installing benches, cleaning up, and adding lights to restore Silver Creek
Hacienda Involved Parents and Staff	Continuing teacher/student field trips and scientific training on watershed issues. Establishing a native plants nursery and associated plant greenhouse
Santa Clara County Farm Bureau	Hiring a water quality specialist to increase Farm Bureau's participation in the WMI
Silicon Valley Toxics Coalition	Conducting a High school student's river monitoring program for Mercury TMDL. Develop a replicable program linking schools with public and private partners to monitor, collect and analyze new information
Silicon Valley Toxics Coalition	Operating support for involvement in the WMI
Peninsula Conservation Center Foundation	Providing and Planning watershed-specific plants for the Seed Collection and Planting Project
Earthcapades	Producing interactive CD-ROM linked to environmental education website and a presentation to 100 schools of a WATER! Program
Silicon Valley Pollution Prevention Center	Optimizing a reproducible and efficient pilot for a high technology industrial water system
Silicon Valley Pollution Prevention Center	Participating in the WMI and TMDL activities
California Farm Link	Creating a farmer run organization ready to negotiate with the city to lease agricultural land using recycled water
Greenbelt Alliance	Participating in the WMI and TMDL activities
Children's Discovery Museum	Supporting the Museum's BioSITE environmental education program

Proposals were reviewed according to the criteria described in the Request for Proposals and assigned a numerical rating. In order to be eligible for a Watershed

Grant an organization would need to be a tax exempt non-profit (501(c)3) within the state of California. Criteria included demonstrations of the following:

- Expertise in watershed management and/or community participation and outreach activities related to environmental issues,
- Ability to work with different kinds of organizations,
- Organizational and program success,
- Fiscally and administratively responsibility, and
- Ability to leverage resources.

The reviewers then met on June 7, 2000 to discuss the ratings and prepare final recommendations. A total amount of \$190,000 was available for the program grants, and \$47,500 for operating support grants.

The review team discussed the merits and limitations of each proposal, and came to a unanimous decision on the recommended awards. Grant awards were given to the organizations listed in Table 13.

Table 13: Watershed Grant Awards

Type of Grant	Organizations
Program Grant - \$43,050	Hacienda Involved Parents and Staff
Program Grant - \$45,000	Peninsula Conservation Foundation
Program and Operating Grant - \$40,000	San Francisco Bay Bird Observatory
Program Grant - \$35,000	Natural Heritage Institute
Program Grant - \$22,000	Aquatic Outreach Institute
Program Grant - \$ 8,700	Children's Discovery Museum
Program Grant - \$ 2,850	Milpitas Foundation for Education
Operating Grant -\$10,000	Santa Clara County Farm Bureau
Operating Grant -\$10,000	San Francisco Estuary Institute
Operating Grant -\$8,134	Greenbelt Alliance
Operating Grant -\$ 6,633	Silicon Valley Pollution Prevention Center
Operating Grant -\$ 6,133	Silicon Valley Toxics Coalition

Enhancements and conditions related to coordination and ensuring participation in the WMI were built into each agreement. Over \$120,000 was pledged as matching funds from those receiving awards. For those entities not receiving awards, targeted resources, both within the City and regional organizations, were identified to assist those organizations. Several of them were encouraged to submit proposals to the City's Youth Watershed Education Grant for their August 2000 round of funding requests.

An agreement between the City and the Community Foundation Silicon Valley for establishment of a donor-advised watershed grant fund was approved by the City Council at their April 18, 2000 meeting. As per the agreement, half of the grant monies were awarded to each awardee in the beginning of the cycle (July/August 2000), with the final distribution of grant monies after six months and the receipt of a status report on the program or operating activities. Grant contract managers have been established within the ESD to coordinate and assist grantees on their projects. An initial "kick-off" meeting for all of the grantees to allow for cross training and coordination of activities was held in late July to early August.

Next Steps

A review of the Watershed Grants Program will occur in early 2001 to assess effectiveness and to determine impacts with regard to achieving the program's stated goals and purposes. Based on this analysis, a recommendation and report will be made to the City Council.

IV-D REGIONAL MONITORING PROGRAM

The Regional Monitoring Program (RMP) is a comprehensive monitoring program administered by the San Francisco Estuary Institute. It assesses sediment and water quality, as well as the toxicity and bioaccumulation of priority pollutants. The RMP monitors numerous locations in the San Francisco Bay and the Sacramento/San Joaquin Delta, and now samples two times per year during the winter and summer. The City supports one additional sampling station in the southern end of the Bay, Station C-3-0. This station is monitored in cooperation with the Regional Board and the San Francisco Estuary Institute. The City also provides significant resources toward the Estuary Interface Pilot Study and the Atmospheric Deposition Pilot Study. The City will continue its active support and participation in the RMP throughout 2001.

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V OUTREACH

The City provides outreach on flow reduction and pollution prevention. Highlights of the outreach activities for this reporting period are presented below; details are given in Appendix H.

V-A FLOW REDUCTION OUTREACH

Flow reduction outreach is done in support of SBWR and Indoor Water Conservation.

V-A1 SOUTH BAY WATER RECYCLING OUTREACH

The purpose of SBWR outreach is to educate the public and customers about the benefits of recycled water, and increase its use among customers.

Findings and Accomplishments

Marketing activities for this reporting period include:

- Conducted customer outreach meetings;
- Conducted outreach events: WateReuse 2000 conference; South Bay Home and Garden Show; Guadalupe River Park & Gardens *Pumpkins in the Park*; and City Council District 3 and District 8 Community Festivals;
- Conducted two *Recycled Water Site Supervisor* training workshops;
- Completed a recycled water customer satisfaction survey;
- Produced a new SBWR presentation folder;
- Provided customer and stakeholder presentations and plant tours as requested;
 and
- Hosted a recycled water visit from an Australian Member of Parliament.

Next Steps

Anticipated Marketing Activities for the next reporting period between January and June 2001 include:

- Conduct a stakeholder meeting regarding the SBWR Phase II expansion plan;
- Develop strategies in response to feedback received from customer survey;
- Presentations to constituents of business trade associations, community and environmental groups;
- Complete and mail water challenges brochure;
- Complete permanent Recycled Water Demonstration Garden interpretive sign;
- Produce *Recycled Water Demonstration Garden* brochure and train garden docents:
- Provide two Recycled Water Site Supervisor training workshops;
- Revise and expand the *South Bay Water Connections* environmental education activities and conduct workshops for middle school educators;

- Update SBWR collateral, customer binder, and trade-show materials;
- Produce give away items for event distribution;
- Provide construction outreach support and materials to contractors;
- Continue to offer customer and stakeholder presentations and plant tours as requested; and
- Review contractors' specifications for outreach efforts.

V-A2 INDOOR WATER CONSERVATION OUTREACH

The City provides public outreach on flow reduction and water conservation in the commercial, institutional and residential sectors. Outreach activities for this reporting period are presented below.

Findings and Accomplishments

ULFT Outreach

With conclusion of the MFD Voucher Program, the full-page ad slot in the Tri-County Apartment Association magazine has been transferred to the Water District. It will be used to support new Water District managed MFD programs.

Water Efficient Technologies Program Outreach

The City received an Award of Excellence in the Joey Award competition for the design of the Water Efficient Technologies Program mailer. Hosted by the San José Convention & Visitors Bureau, the Joey Awards recognize businesses and individuals in the greater San José area for their creativity in broadcast and print media. The mailer invites businesses to participate in a San José program to reduce flows to the Plant, which offers rebates up to \$50,000 per project.

In the last six months, program effort has focussed on developing outreach strategies and materials. New materials include a brochure, an executive letter, two postcards, a website, and giveaway items such as a pen and mouse pad. Future outreach will include quarterly recognition advertisements for successful program participants.

The targeted audience continues to be industrial facilities managers and Chief Executive Officers, with marketing pieces tailored to industry-specific concerns. This campaign, which is expected to run through February of 2001, will also reach out to commercial business owners for the first time in several years. At this time, the quarterly recognition advertisements are planned to continue throughout the duration of the program.

Program representatives also partnered with the Department of Water Resources for a display booth at the *Northern California Plant Engineering Show*.

Water-Wise House Calls Program Outreach

From July through October 2000, the City partnered with the Water District to promote the Water District's Water-Wise House Calls Program in Santa Clara County.

The Water District put most of their marketing efforts into the months of July and August. The main elements of the Water District's Water-Wise House Calls campaign included:

- Direct mail pieces in English that were distributed in the July *Penny Saver*. Two coupons targeting higher income households (\$40,000 and above) for water-conserving washing machine rebates were also distributed through Ad Works.
- Television advertising consisted of 30 spots on cable TV and KNTV for English audiences; Spanish television with 30 spots on KDTV (Channel 14) and KSTS (Channel 48). Spanish television stations also did a news segment involving a "House Call" to a Spanish-speaking home.
- Print advertising in English included San José Mercury News quarter-page advertisements from early July until the end of August and two-by-five-inch page advertisements in Vietnamese in Viet Mercury from July until mid-August.
- Bill inserts in English were distributed through San José garbage bills.
- A letter was mailed to the top 30% of water users throughout Santa Clara County inviting them to participate in the program.

The City complimented this plan by extending campaign efforts from the end of August until the end of October.

- Extended Viet Mercury advertisements in Vietnamese to run every other Friday from mid-August through October. Bi-weekly advertising featured in three other Vietnamese papers from July through October.
- Created and produced a Spanish radio advertisement.
- Extended English print advertising in the San José Mercury News for September and October.
- Distributed bill inserts in English through garbage bills in San José and some water retailers for September and October.
- Bought 30 radio spots on local English radio stations.
- Aired a series of rotating slides about water conservation programs on the Community TV (Channel 37A) channel during the campaign.
- Mailed a letter to the top 20% of water users in the tributary area with movie tickets as incentives for having their homes audited for leaks.
- Began a toilet and faucet "leak repair" brochure in English that can be left with homeowners after the Water-Wise House Call inspection. It is scheduled to be finished this winter.

- Produced a general audience brochure called "Slow the Flow" with other water saving tips.
- Acquired a new look for ESD's Slow the Flow website and included the House Calls information. The site includes an application form for Internet users to request a Water-Wise House Call.

Preliminary Results

The Water District reported that as of October 2000, 655 House Calls surveys were completed in the Plant's tributary area during the campaign. Last year's campaign garnered 487 surveys within the same time period (July through October) using similar outreach media, excluding the movie ticket incentive and television ads. Preliminary results show that 372 customers of the 655 surveys completed heard about the program through the movie ticket incentive offer. Initial results appear to show that the movie ticket incentive had a significant positive impact on program participation. A final evaluation of the campaign will be completed before the next reporting period, which will help determine future marketing strategies.

Special Events

ESD outreach staff promoted the Water-Wise House Calls program, flow reduction, general water conservation, washing machine rebates and wastewater path awareness to residential audiences at the following special events:

- Fall Home and Garden Show,
- Council member events,
- Compost bin sales, and
- Sesquicentennial Celebration.

Next Steps

In July 2000, the Water District began managing the outreach and administration for several of the remaining ULFT programs countywide. They now administer and promote a ULFT Distribution Program, a full-service Apartment Program, and a full-service and fee-for-service Commercial, Industrial, Institutional ULFT program.

Without the ULFT rebate program, outreach for this dry weather period will be focused on indoor leak detection and repairs, specifically the replacement of defective toilet flapper valves in homes and apartments.

The City will work with the Water District in this outreach effort. As part of this year's outreach efforts we will produce a toilet and faucet "leak repair" brochure; that information will also be included in our website and at various community events. Additional details on the outreach media campaign will be determined as the campaign nears startup.

V-B POLLUTANT REDUCTION OUTREACH

This section features highlights and assessment of the City's pollutant reduction outreach activities. These activities include regional coordination and collaboration efforts, targeted outreach to schools, the tours program used for all audiences, and the IU Academy.

Program Changes and Highlights

Western Pollution Prevention Network Conference Presentation

City staff presented a paper titled "An IU Academy to Assist Industry with Consistent Compliance" at the Western Regional Pollution Prevention Network's Fall 2000 conference in San Diego, California on October 26, 2000. Information on the purpose, course content, and evaluation of the IU Academy was presented.

Pollution Prevention Symposium Presentation

The City participated in the West Coast Pollution Prevention Symposium held in Monterey, California on November 9, 2000. City staff delivered a presentation, and participated in a panel discussion. The presentation was titled "BMP-Based Permitting", an overview of the City's use of BMPs to regulate commercial and industrial facilities for wastewater and pollutant discharges.

Department of Toxic Substances Control Auto Campaign to Use San José Outreach Materials

Representatives of the Department of Toxic Substances Control who are preparing an automotive website contacted the City. At the Department of Toxic Substances Control's request, the City provided the Graphic art from the City's automotive pollution prevention poster "Do It Right" for use on the statewide site.

V-B1 REGIONAL OUTREACH

City Staff continued their active representation on outreach committees of the Bay Area Dischargers Association (BADA), the Bay Area Pollution Prevention Group (BAPPG), the Public Education and Technology Transfer Committee of BAPPG, and the WMI. The City is also active in the Urban Runoff Program, and is represented at the Bay Area Stormwater Management Agencies Association (BASMAA).

During this reporting period, City staff participated in the following regional collaborative activities and projects:

- The joint BASMAA/BADA Media Relations project;
- Coordination of the review of regional Spanish radio ads for BAPPG's Spanish Radio ad campaign on radio station KSOL;
- Coordination between BAPPG and BADA on budget processes;

- Development of a website for the newly formed Bay Area Clean Water Agencies (BACWA) organization. BACWA is an organization with membership from both wastewater and stormwater agencies;
- Ad hoc committees of the Urban Runoff Program;
- Participation on a committee to assist the contractor selected to develop a
 workplan for, and implement the WMI/Urban Runoff Program, combined
 outreach strategy (now referred to as the Watershed Education and Outreach, or
 WE&O, strategy);
- Co-facilitation of the BAPPG annual pollutant and issue prioritization process;
- Chair of the Public Education and Technology Transfer Committee of BAPPG;
- Chair of the WMI Outreach Subgroup; and
- Participation in BAPPG's newly formed mercury workgroup.

Watershed Education and Outreach Ad Hoc Task Group

The City is participating on the Watershed Education and Outreach Ad Hoc Task Group (WE&O). WMI and the Urban Runoff Program share many of the same messages and audiences. Over the last two years, the City worked with the Urban Runoff Program and WMI representatives, and with interested parties to develop the following:

- A strategy for delivering public education messages common to the two groups;
- An RFP to select a contractor to implement the strategy; and
- A workplan for implementation.

The WE&O was formed to work with the contractor on implementation over the three year life of the workplan.

Media Relations Project

The City participated in resolving contractor and funding questions for *the Media Relations Project*, developing the annual workplan, and developing press releases (automotive leaks and stormwater pollution, and the connection between burning wrapping paper and dioxin in the Bay).

MEEA Participation

San José began attending meetings of the Mid-Peninsula Environmental Educators Association (MEEA) to facilitate understanding and more complete participation in regional planning and implementation of their school related activity. The jurisdictional area served by MEEA overlaps the service areas of both the WMI and the Urban Runoff Program. Several of the WMI Core Group members and Program copermitees are active in environmental education and participate in all three. Water-related Educational Programs represented at MEEA include those related to drinking water, stormwater, reclaimed water, and wastewater.

Formation of a Schools Advisory Group

San José staff will participate in a newly formed schools advisory ad hoc group. San José recommended formation of this group during the recruitment of the contractor for implementation of the *WE&O Strategy*. The group will utilize the expertise of local environmental educators to advise the contractor during development and implementation of a strategy for environmental education to schools. The first meeting of the advisory group is scheduled for January 8, 2001. The City will include an update on the progress of this activity in the July 2001 *CBS Report*.

V-B2 GENERAL OUTREACH

The General audience includes all residents. The City delivers its messages to this audience through participation in regional and City-sponsored activities that include tours, events, ads and outreach campaigns, and a residential website. While updates on selected elements are presented below, please refer to Appendix H updates on the other activities.

V-B2.1 ESD WEBSITE UPDATE

The last ESD site traffic analysis revealed that there were 5,718 user sessions in November of 2000. Nearly 45% of the users were classified as an industrial or commercial inquiry.

The entire ESD website was overhauled with a new look and feel in 2000. The site continues to provide information on key wastewater and stormwater regulatory programs, including frequently requested forms and contact information, and there are pages dedicated to the WMI, commercial facilities, and residential water pollution issues. New materials posted on the ESD website during this reporting period include revised "Slow the Flow" campaign information, and completely updated South Bay Water Recycling and Municipal Water sites. Lastly, the site features the beginnings of a whole new section: "Air, Land and Energy", which includes a much expanded "Green Building Program" site.

The WMI's website has been hosted by ESD since its inception, and the site was accessed through the City of San José Home Page. At the request of the (WMI) Core Group, the WMI website was given a separate, direct web address:

http://www.scbwmi.org

All of the City's ESD web information pages can be found at ESD's home page:

http://www.ci.san-jose.ca.us/esd

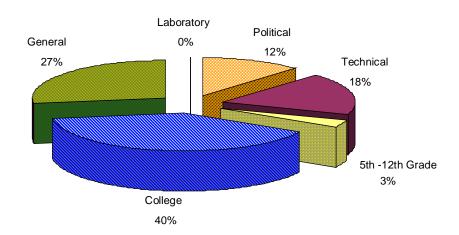


Figure 11: July to December 2000 Plant Tour Participants

Next Steps

The ESD website will be updated to include comprehensive resources categorized by three user centered interfaces: Residents, Businesses, and Schools.

V-B2.2 PLANT TOURS

Tours are used by different divisions of ESD to highlight the importance of pollution prevention, discuss the need for residential and commercial water conservation, and instruct students on the process of wastewater treatment. During this report period, the City trained 9 new Plant tour docents, bringing the total of trained staff members to 18.

Tours help people to link an action (dumping hazardous materials or too much water down the drain) to a place (the Plant and the Bay). Under a grant agreement funded by the City, some of these tours include a visit to the San Francisco Bay National Wildlife Refuge (the Refuge), where tour participants can see the direct connection between the Plant and the wetlands it protects. During the last six months, Plant tours were given to 33 groups, representing 399 people. The audiences are distributed as shown in Figure 11.

V-B2.3 ASSESSING OUTREACH

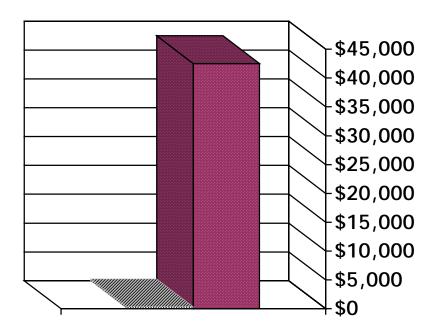
The City has completed several surveys of its outreach efforts to better serve the public, commercial and industrial facilities, contractors, and developers. Data gathered includes knowledge of programs, information retained, distribution, finding the best audience targets, and the usefulness of the

information. The following are two such assessments: Collaboration Making "Cents" and the Water Awareness Program

Collaboration Making "Cents"

Coordinating City objectives with the objectives of other regional programs and activities has significant benefits - The cost of implementing public education and outreach programs is shared, reducing the cost to the City. For many of the activities where the City is coordinating outreach with other agencies, the City received between three and five dollars of services and products for each actual dollar spent. In one case, the BAPPG Pest Control Operators Study project, the City received approximately \$100 in goods and services for each dollar invested (Figure 12). When the issue is regional, collaboration can be good business.

Figure 12: Pest Control Operator Report \$



San Jose \$ = \$325
 ■ Total Partnership \$ = \$42,500

No matter how informed people are about less toxic pest control alternatives, if the goods and services aren't there, nothing changes. The PCO study is significant because it looked at both the supply and demand side of less toxic pest controls. In part due to the PCO study, workshops to instruct Pest Control Operators in the use <u>and</u> sale of less toxic pest control alternatives are in progress.

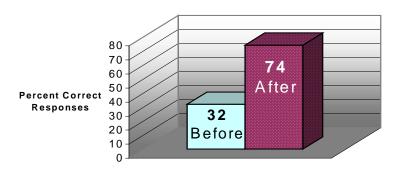
Water Awareness Program

One of the programs delivering watershed messages over the last four years is the Water Awareness Program. One task of this program is to monitor its effectiveness. During the last six months City Park Rangers gave water awareness presentations to 50 classes, grades 3-7, addressing more than 1300 San José students. During fall 1999 presentations, pre and post-tests were administered to six 5th grade classes and three 6th grade classes to determine the effectiveness of this educational tactic. Additional test results from one local science magnet school, Hacienda, presentation were excluded because their very high pre- and post-scores would skew average results. The average change in awareness due to the presentations is shown in Figure 13 below for one of the measured concepts. Changes in the program will be made based on the results of the survey. Maintenance of this testing is planned to continually improve this program's effectiveness.

Figure 13: Results of Water Resources Evaluation

Increase in Knowledge on Selected Question after Presentation

Question: Trash on the street gets washed into creeks when it rains T F



V-B3 TARGETED OUTREACH

The City delivers its outreach messages to targeted audiences using events, website, tours, and presentations.

V-B3.1 NON-NATIVE SPEAKING AUDIENCES

The City continues to provide several BMPs in the languages of San José's largest non-native speaking audiences: Spanish and Vietnamese.

V-B3.2 SCHOOL AND YOUTH OUTREACH

School Programs for the reporting period stressed storm drain pollution prevention to protect our creeks, the critical nature of the protection the Plant provides for the Bay, water conservation, and the value of recycled water. Highlight of this year's efforts with schools include:

- The City distributed its *It's Wet, It's Wild, It's Water!* education packet to all 237 principals for grades 3-6 in our jurisdiction.
- The San José City Council approved \$50,000 to support the Youth Watershed Education Grant Program's second year of disbursing grant awards to educators. So far, six of the 14 first year grantees have completed their projects. Grants were used primarily to integrate watershed activities into school curricula and summer camps and to support field trips.
- The *Slow the Flow* educator's manual is in the final stages of being matched to California State Content Standards in Science. Since teachers are evaluated on how well students test against those standards, materials that meet state educational standards have a better chance of being adopted by educators.
- The City retained a consultant to help correlate *South Bay Water Connections, Environmental Education Classroom Activities for Grades 6*–8 with the California State Content Standards in Science, English, and Math. The activities in the manuscript are designed to "plug in" and supplement to existing classroom school district curricula.
- Six new teachers were oriented for joint tours/Slow the flow program.
- After exposure to the City sponsored joint tours/Slow the flow educational
 programs at the Refuge, sixty per cent of exit survey respondents said that
 they would change behavior in some positive way with regard to water
 conservation and/or pollution prevention. Future plans include an attempt
 to contact respondents at a later date to see if the behavior change is
 permanent.

V-B4 COMMERCIAL AND INDUSTRIAL OUTREACH

The City delivers its outreach messages to commercial and industrial audiences using the *Tributary Tribune* IU newsletter (see Appendix H Part VI for the Summer 2000 edition), events, its website, tours, speaking engagements, and its IU Academy.

V-B4.1 INDUSTRIAL USER (IU) ACADEMY

During this reporting period, the city held the IU Academy class "Pretreatment Program for Permitted Industrial Users" twice. Twenty-nine people from twenty-five companies attended. To date, 340 people from 184 companies, 4 cities and the county have attended the IU Academy.

Surveys conducted in the classes indicate that participants are learning more about the pretreatment program through this class. The IU Academy uses exit surveys to evaluate the self-assessed increase in knowledge of participants on particular topics from before and after each session of the Academy.

Next Steps

Class participants continue to indicate better understanding of topics like permitting, self-monitoring, and storm water Notice of Intent requirements after attending the classes, and there is a continuous waiting list for the class. IU Academy classes will continue to be held. The IU Academy is re-evaluated annually, and modified as necessary to address new issues and topics

V-B4.2 IU NEWSLETTER SURVEY

Final report in the January 2000 CBS Report.

V-B4.3 SPECIALIZED BMPS AND MATERIALS

Final report in the January 2000 CBS Report.

Appendix A

The *Clean Bay Strategy* Timeline

Appendix B

Comparative Flow Savings Estimates For ULFT Programs

Table 14: Comparative Flow Savings Estimates For Water Efficiency Programs

Program Name	Units installed	Fiscal Year 00/01	gpd savings	00/01 gpd Savings to Date	gpd savings	00/01 gpd Savings to
Frogram Name	to Date	Goal	estimate –	– San José	estimate -	Date -
	00/01		San José		CUWCC	CUWCC
Community Partnership	1398	7,500	30	41,940	18.9	26,422
Small Multi-Family Dwelling	115	7,700	70	8,050	35.8	4,117
Single Family Dwelling Fee-For-Service	337	3,000	30	10,110	18.9	6,369
Distribution	1,027	1,200	30	31,135	18.9	19,410
MFD Voucher	677	0	55	37,235	35.8	24,236
Commercial Toilet Voucher	73	500	48	3,504	16-57	1,511

Table 15: Previous Reporting vs. Program Performance (Actual Units)

Program Name	Units reported installed in CBS Report 6/00	Final Program numbers for period ending 6/00	Flow Savings reported in CBS Report 6/00	Final Flow Savings numbers for period ending 6/00
ULFT Rebate Program	19,784	19,784	713,000	713,000
Community Partnership	0	44	0	1,320
Small Multi-Family Dwelling	0	0	0	0
Single Family Dwelling Fee-For- Service	0	0	0	0
Distribution	300	290	9,155	8,825
MFD Voucher Program	300	308	17,000	17,975
Commercial Toilet Voucher	711	711	34,128	34,080
Residential Washer Rebates	4,156	4,000	58,184	58,400
Commercial/MFD Washer Rebates	0	11	0	792
Water Efficient Technologies – Commercial	5 Projects	5 projects	164,000	164,103

Appendix C

Task 10 Copper Action Plan Final Report August 23, 2000

The above report is available upon request. For a copy call (408) 945-3000.

Appendix D

Task 10 Nickel Action Plan Final Report August 23, 2000

The above report is available upon request. For a copy call (408) 945-3000.

Appendix E

Summary Report on the Copper and Nickel TMDL Work Activities, submitted by the Bay Monitoring and Modeling Subgroup of the WMI Core Group, October 4, 2000

Appendix F

December 12, 2000 Update for the *Bay Monitoring and Modeling Subgroup of* the Watershed Management Initiative Workplan

Appendix G

Avian Botulism Monitoring Program Artesian Slough, Coyote Creek, and Alviso Slough May-November 2000, prepared by Cheryl Millett SFBBO for the Environmental Services Department, December 2000

Appendix H

Outreach Activities for July 2000 – January 2001

Part I: Events

Part II: Distribution of Outreach Materials for the 6- Month Period: 6/1/00

through 11/31/00

Part III: Available EE/Outreach Materials

Part IV: Materials Used by IC/ID Inspectors 6/1/00 through 11/31/00

Part V: ESD Developed Materials

Part VI: Tributary Tribune

Part I: Events

These Tables 16-22 summarize the location, the date, the number of attendants, and the message of each Outreach event.

Table 16: General Outreach - Residential

Events	Date	People Reached	Messages
Home Show/Santa Clara County Fairgrounds	9/8/00- 9/10/00	732	Water Wise House Call sign-ups(for home water audits); integrated pest management; automotive maintenance; South Bay Water Recycling; pollution prevention and the difference between storm and sanitary sewer systems
Sesquicentennial Celebration, Downtown	9/9/00	600	Used a public participation game designed to messages about convey water pollution prevention, water conservation, water related environmental history. Coordinated with solid waste messages.
Council Member Manny Diaz' Community Festival, District V	9/10/00	75	Proper disposal of household hazardous wastes.
15 th Annual Youth Science Institute Wildlife Festival	10/8/00	180	The difference between storm and sanitary sewer systems; how changes in pH balance affect wildlife; we live in the Santa Clara Basin watershed
Chinese Moon Festival, Overfelt Gardens	9/17/00	124	Water Wise House Call sign-ups(for home water audits); integrated pest management; pollution prevention and the difference between storm and sanitary sewer systems
Celebration 150	9/2/00	500	San José Water Wise House Call sign-ups(for home water audits); watershed trivia
Council Member Alice Woody's "Day In the Park", District VII	9/16/00	200	The difference between storm and sanitary sewer systems; water pollution prevention, proper disposal of household chemicals, Value of recycled water, value of treatment plant.
District III Community Celebration	9/23/00		The difference between storm and sanitary sewer systems; water pollution prevention, proper disposal of household chemicals, Value of recycled water, value of treatment plant.

Events	Date	People Reached	Messages
Cindy Chavez Community Picnic	10/23/00		The difference between storm and sanitary sewer systems; water pollution prevention, proper disposal of household chemicals, Value of recycled water, value of treatment plant.
YSI Wildlife Festival, Alum Rock Park	10/08/00	100	Water Conservation, Awareness and appreciation of creeks and the Bay. Used a pH demonstration to show that common household items can impact the creek.
United Neighborhood of Santa Clara County, Workshop and Resource Fair, Luther Burbank School	10/14/00	About 35	Representatives of neighborhood organizations, and representatives of agencies that provide neighborhood services. Messages: What is a watershed, and what is the WMI
Syva Employee's Safety Fair, Sunnyvale Community Center	10/20/00	About 100 employees	Wastewater treatment plant, recycled water, water conservation. (Also reported as REGULATED COMMERCIAL / INDUSTRIAL / INSTITUTIONAL OUTREACH below). Coordinated with Sunnyvale's Environmental division, Dept. of Public Works.

Table 17: General Outreach - Watershed Involvement Projects

Creek Clean-ups	Date	San José Sites	Messages/ Participants / Pounds of Trash
Coastal Clean-up	September 16	Guadalupe River at McClellan	Bay and creek protection and the connections between street and creek and water use indoors and outdoors. More than 50 people and 27 cubic yards of trash and junk.

Table 18: Targeted Outreach - Schools

Tactic – Plant Tours	Date	People Reached	Messages
Plant tours	Continuous	992 students and teachers	Importance of the Plant in protecting the Bay. Value of recycled water. Importance of water conservation. Pollution prevention.
Kid's Day (Alviso)	8/5/00	130 students and	Appreciation of the salt marsh. The role of the plant in Bay protection. Water conservation.
Where does the water go? (Alviso)	7/29/00	8	Importance of plant and water conservation. Fragility of salt marsh.
Sloo who? (Alviso)	9/2/00	5	Water conservation. Importance of plant in Bay protection.
Salinity Sluths (Alviso)	7/8/00 9/30/00	10	Wetlands protection and restoration. Water conservation.
Puzzling pipes (Alviso)	8/12/00	3	Wastewater paths. Difference between various water systems.
Marsh Mosaic	9/16/00	9	Importance of plant. Water conservation. Appreciation of the wetlands.
Scavenger Hunt (Alviso)	Ongoing		Watershed stewardship, water conservation.
Joint plant/ Center tour	7/29/00 10/28/00	22	Appreciation of Bay and wetlands, Water conservation. Pollutio0n prevention.
Workshop tour (Alviso)	9/30/00	20	Overall view of Center's programs for other agencies.
Summer Camp(Alviso)	7/00	32	Water conservation. Bay appreciation.

Table 19: Regulated Commercial/Industrial Outreach

Events	Date	People Reached	Messages
NCPE, Northern California Plant Engineering and Maintenance Exposition, Santa Clara Convention Center	9/20/00- 9/21/00	For flow incentive prgs 10. Facilities and env. staff – 50	Flow reduction, water reuse through financial incentives to invest in changes to existing processes. (Also reported as NON-REGULATED COMMERCIAL / INDUSTRIAL / INSTITUTIONAL OUTREACH below). Booth co-sponsored with California Dept. of Water Resources and East Bay Municipal Utility District.
Syva Employee's Safety Fair, Sunnyvale Community Center	10/20/0	About 100 employees.	Wastewater treatment plant, recycled water, water conservation. (Also reported as REGULATED COMMERCIAL / INDUSTRIAL / INSTITUTIONAL OUTREACH below). Coordinated with Sunnyvale's Environmental division, Dept. of Public Works.
First distribution of Direct Mailer to Permitted Industries	9/20/00	250	Reduce wastewater flow, conserve water – How to use available financial incentives.
Second distribution of Direct Mailer to Permitted Industries	9/20/00	250	Reminder of above.
Direct contact to potential users of the incentives via NCPE described in events above.	9/20/00- 9/21/00	50 "qualified" for flow incen. prgs. 300 facility and env. Staff visited exhibit.	Flow reduction, water reuse through financial incentives to invest in changes to existing processes or building systems. (Also reported as REGULATED COMMERCIAL / INDUSTRIAL / INSTITUTIONAL OUTREACH above). Booth co-sponsored with California Dept. of Water Resources and East Bay Municipal Utility District.
Winter 2000	Feb	400	Pretreatment Streamlining, U.S. EPA method 1664 for oil and grease, Evening and weekend inspections program, California Water environment Association Awards
Spring 2000	May	400	Flow Audit Study, IU Academy, Flow Incentives Program, SBWR Program
Summer 2000	August	600	Copper and Nickel Action Plans Water Efficient Technologies, flow reduction rebates, IU Academy, Northern California Plant Engineering Show

Table 20: Industrial User Academy

IU Academy	Date	People Reached	Messages
First Class	10/05/00- 10/06/00	22	Understanding compliance with Pretreatment Program requirements for Permitted IUs
Presentation at Western Regional Pollution Prevention Network Fall "00 P2 Conference, San Diego, CA	10/26/00	30	Shared the development and use of an "IU Academy" for assisting permitted dischargers to achieve and maintain consistent compliance with complex and changing requirements.
Second Class	11/12/00- 11/13/00	22	Understanding compliance with Pretreatment Program requirements for Permitted IUs

Table 21: Provision of Outreach Materials to Other Agencies

Contact	Agency	Materials Sent	Materials/Comments/Purpose
Ken Null	CCCSD	2/14/00	Request for ABAG study, IWPP, Waterworld articles
Steve Durchin	IWPP/City of Austin		ABAG study, Waterworld article
Cathleen Brennan	City of Sunnyvale	3/23/00	Grease Training Opportunities
Cathleen Brennan	City of Sunnyvale	3/30/00	Grease Waste Haulers List
Betsy Elzufon	Larry Walker & Assoc.	3/30/00	Residential Grease BMP's.
Eva Justimbaste	EOS/US Filter	6/1/00	Discussed Sizzler pH problems
Lou Garcia	Redondo Beach, CA (City Manager)	6/29/00	Samples of stormwater materials to add to their reference files of materials used by other agencies.
CA DTSC/OPPTD	DTSC	7/19/00	Electronic copies of Do It Right Posters (Spanish/English and Vietnamese/English) to adopt for a state-wide Vehicle Maintenance Pollution Prevention Project
Steve Pedersen	Bureau of Sanitation, City of Los Angeles	11/1/00	Grease articles, code book, plan check docs
Blair Bradley,	Modesto, CA	11/00	Hazardous Materials Program Coordinator
Ted Crandall,	Woodland, CA	11/00	Industrial Pretreatment Specialist
Bill Lampkin,	Oroville, CA	11/00	Environmental Compliance Manager
Union Sanitary District, CA	Union Sanitary District, CA	11/21/00	Samples of Spanish language materials, Graphic Artist contact, and permission to adapt for use in their district.
Chuck Thomas	West Bay Sanitation Dist	12/00	Request for ABAG study, IWPP, Waterworld articles

Table 22: Non-Regulated Commercial Industrial Institutional Outreach

Events	Date	People Reached	Message
Pollution Prevention	07/24/00	40	Behaviors that can prevent pollution of creeks and the Bay.
Workshop for Surface			
Cleaners, SJ/SC WPCP			
NCPE, Northern California	09/20/00-	50 visitors	Flow reduction, water reuse through financial incentives to invest in
Plant Engineering and	09/21/00	"qualified" for flow	changes to existing processes or building systems. (Also reported as
Maintenance Exposition,		incentive prgrms.	REGULATED COMMERCIAL / INDUSTRIAL / INSTITUTIONAL
Santa Clara Convention		300 facility and	OUTREACH above). Booth co-sponsored with California Dept. of
Center		env. Staff visited	Water Resources and East Bay Municipal Utility District.
		exhibit.	

<u>Part II</u>: Distribution of Outreach Materials for the 6- Month Period: 6/1/00 through 11/31/00

This table includes the title, subject, media type, language, and audience distribution of ESD outreach material distributed by City staff in this reporting period.

Part III: Available EE/Outreach Materials

This table is a comprehensive list of the approximately 150 ESD outreach materials currently available for use by City staff, industrial dischargers, and the general public. Distribution of over 6,400 pieces of literature was recorded in this reporting period.

Part IV: Materials Used by IC/ID Inspectors 6/1/00 through 11/31/00

City	<i>Inspectors</i>	distributed	the	follow	ing list	of m	aterials	during	the re	porting 1	period.
-10	IIIDPOCCOID	GIBUITO GICCG	uii	1011011	1115	01 111	accidence	~~1117			, or i ou.

Part V: ESD Developed Materials

The City developed several printed materials for use and distribution. In the following tables, these Materials are listed by subjects, media types, languages, and audiences.

Part VI: Tributary Tribune

The referenced Tributary Tribune and other editions are available at the City of San Jose Environmental Department Website at

http://www.ci.san-jose.ca.us/esd/tribtribune.htm

Clean Bay Strategy Report – January 2001